



## U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs  
Registration Division (7505P)  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

EPA Reg. Number:

524-617

Date of Issuance:

11/1/18

## NOTICE OF PESTICIDE:

☒ Registration  
☐ Reregistration  
(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

M1768 Herbicide

## Name and Address of Registrant (include ZIP Code):

Thomas Marvin  
Bayer CropScience  
1300 I St., NW  
Washington, DC 20005

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(B). You must comply with the following terms and conditions:

**General Terms**

1. You must submit and/or cite all data required for registration/reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:

Michael L. Goodis, P.E.  
Director, Registration Division (RD)  
Office of Pesticide Programs (OPP)

Date:

11/1/18

2. You are required to comply with the data requirements described in the DCIs identified below:

- a. Dicamba GDCI-029801-1721

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: <http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1>

3. This registration will automatically expire on December 20, 2020.

### **Labeling/Relabeling**

The previously approved labeling contains an expiration date of November 9, 2018 and cannot be used beyond that date. New labeling is required on the product beyond this date. Beginning November 10, 2018, before using any product with expired labeling, users must first access a website maintained by Bayer CropScience to review directions for use and obtain a copy of the current final printed label, and must have that label in their possession at the time of use.

4. Final Printed Label. You must submit one copy of the final printed labeling that is consistent with the new accepted label to EPA before any existing product already in the channels of trade is relabeled with that label, or before you release any new product for shipment featuring that label. Any changes to the final printed labeling must be submitted to EPA before being used in future production.
5. Posting Updated Information for Users. From November 10, 2018 through December 20, 2020, you must maintain a website and publish the following material and statements in a clear and easily accessible manner:
  - a. A copy of the most current final printed label submitted to EPA per paragraph 4;
  - b. "Xtendimax with VaporGrip Technology is a Restricted Use Pesticide.";
  - c. "The label affixed to the container in your possession may contain incomplete or outdated directions for use. Use of this product is prohibited unless the user has received and is in possession of the labeling linked on this website featuring an expiration date of December 20, 2020 at the time of use.";
  - d. "Users must comply in all respects with labeling featuring an expiration date of December 20, 2020, regardless of any contrary language on the label physically affixed to any individual container."; and
  - e. "If you have any questions about the use of this product, please contact 1-844-RRXTEND."

When relabeling or labeling as set forth below, either the sticker or the new label (approved on October 31, 2018) must be affixed to *each individual container* of Xtendimax with VaporGrip Technology (EPA Reg. No. 524-617) that is intended for end use, sale or distribution.

6. Relabeling Product Already in Trade. All product currently in the channels of trade, in retail inventories, in the distribution chain (packaged and released for shipment), and product that was manufactured before November 9, 2018 must be relabeled with a sticker on the container with an approved label (dated October 31, 2018) accompanying the container, or the approved label (per paragraph number 4 above) on the container. If stickering is used then a sufficient number of copies of the current labeling (approved October 31, 2018) listing an expiration date of December 20, 2020 will be placed in the carton to accompany the number of individual containers in the carton. Bayer CropScience agrees to the following:
  - a. All relabeling will be conducted in an EPA-registered establishment, and production must be reported per FIFRA Section 7.
  - b. The sticker will contain the following information:
    - i. "Restricted Use Pesticide";
    - ii. "The label affixed to this container contains incomplete or outdated directions for use. Use of this product is prohibited unless the user has received and is in possession of the current labeling listing an expiration date of December 20, 2020 at the time of use."; and
    - iii. "User must comply in all respects with new label(ing) listing an expiration date of December 20, 2020, regardless of any contrary language on existing label physically affixed to any individual container."
  - c. Copies of the approved labels must be provided to distributors and must accompany each stickered container at all times.
  - d. Communicate efficiently with Bayer CropScience's entire distribution chain.  
Specifically:
    - i. By December 31, 2018, Bayer CropScience submits to EPA a list of known distributors and retailers that may have received product with previously-accepted labels. (Such list shall be treated by EPA as confidential business information).
    - ii. By December 31, 2018, Bayer CropScience must inform all distributors and retailers on that list of the need, as it is represented in this letter, to relabel, of the legal liability that would result from their sale or distribution of product with previously-accepted labels after October 31, 2018, and that relabeling are production activities under FIFRA and no retailer or distributor may begin any production activities until their establishment is registered with EPA.
    - iii. For those distributors and retailers that are able to relabel in an EPA-registered establishment, Bayer CropScience must instruct them how to affix the Sticker or the new printed label to each product container, and must supply the new approved labels (dated October 31, 2018) and stickers in order for them to do so.
    - iv. For those distributors and retailers that are interested in registering an establishment for pesticide production, Bayer CropScience must refer them to procedures on how to register with EPA as a registered establishment and remind them of FIFRA's production reporting requirements.
    - v. For those distributors and retailers who do not intend to relabel themselves, Bayer CropScience must inform them who to contact so that Bayer CropScience can immediately reclaim the inventory. If Bayer CropScience performs the relabeling, it must be done at an EPA-registered establishment, and all production must be reported per FIFRA section 7.

- e. Bayer CropScience must provide EPA a copy of each communication required above within 30 days of each communication.
7. New Production. Bayer CropScience is responsible for ensuring all product produced, packaged, and released for shipment beginning November 10, 2018 and thereafter bears the new final printed labeling submitted to EPA per paragraph number 4 above. Bayer CropScience must ensure all production activities take place in an EPA-registered establishment and that all production is reported pursuant to FIFRA section 7.

You are advised that if you wish to add/retain a reference to the company's website on your label, then the website becomes "labeling" under FIFRA. If the website content is false or misleading, all products referencing the website would be misbranded and it would be unlawful to sell or distribute them under FIFRA section 12(a)(1)(E). In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Should the Agency find, or if it is brought to our attention, that a website contains false or misleading statements or claims substantially differing from the EPA-accepted registration, the matter will be referred to the EPA's Office of Enforcement and Compliance.

#### **Tank Mixing and Spray Drift Requirements**

8. You must maintain a website at <http://Xtendimaxapplicationrequirements.com>. That website will include a list of products that have been tested pursuant to Appendix A and found, based upon such testing, not to adversely affect the spray drift properties of Xtendimax with VaporGrip Technology. The website will identify a testing protocol, consistent with Appendix A, that is appropriate for determining whether the tested product will adversely affect the drift properties of Xtendimax with VaporGrip Technology. The website must state that any person seeking to have a product added to the list must perform a study either pursuant to the testing protocol identified on the website or another protocol that has been approved for the particular purpose by EPA, and must submit the test data and results, along with a certification that the studies were performed either pursuant to the testing protocols identified on the website or pursuant to another protocol(s) approved by EPA and that the results of the testing support adding the product to the list of products tested and found not to adversely affect the spray drift properties of Xtendimax with VaporGrip Technology, to EPA. EPA will notify you when the Agency determines that a product has been certified to be appropriately added to the list, and you will add appropriately certified products to the list no more than 90 days after you receive such notice from EPA. Testing of Tank-Mix Products must be conducted in compliance with procedures as stated forth in Appendix A.
9. All test data relating to the impact of tank-mixing any product with Xtendimax with VaporGrip Technology on drift properties of Xtendimax with VaporGrip Technology generated by you or somebody working for you must be submitted to EPA, along with a certification indicating whether the study was performed either pursuant to the testing protocols identified on the website or pursuant to other protocols approved by EPA and whether the results of the testing support adding the product to the list of products tested and found not to adversely affect the spray drift properties of Xtendimax with VaporGrip Technology, to the EPA's Office of Pesticide Programs.

10. The prohibition of using products in a tank-mix with Xtendimax with VaporGrip Technology unless the product used is contained on the list <http://Xtendimaxapplicationrequirements.com>, and the identification of the website address, shall be included in educational and information materials developed for Bayer CropSciences, including the materials identified in Appendix D, Section B(1).
11. You must maintain, update and follow an Herbicide Resistance Management Plan (HRM) as laid out in Appendix D regarding grower agreements, field detection and remediation, education, evaluation, reporting, and best management practices (BMPs).

### **Enhanced Reporting**

If Bayer CropScience acquires any of the information identified below, that information must be reported to EPA's Office of Pesticide Programs under section 6(a)(2), or under 40 CFR 159.195 unless you have previously submitted that information to EPA's Office of Pesticide Programs.

12. Information, other than personally identifiable information, received by telephone or in writing regarding potential damage to non-target vegetation from use of dicamba during the 2019 and 2020 growing seasons regardless of any determination that the incident resulted from misuse (intentional or accidental). Information should be forwarded to EPA regardless of which dicamba product may have been used and/or whether or not the alleged damage resulted from a product being used according to label directions. Data should be organized by product and state and should include available information regarding acreage involved, plant species involved, severity of damage, and similar information received. This information must be submitted with cumulative totals and be submitted monthly, beginning March 1, 2019.
13. Information, other than personally identifiable information, received by telephone or in writing regarding reports of dicamba-resistant weeds, and cases of weed control failure and/or suspected resistance. All information should be forwarded to EPA regardless of which dicamba product may have been used and/or whether or not the alleged resistance occurred after an application made according to label directions.
14. A summary of all studies being conducted or sponsored by Bayer CropScience, pertaining to off-target movement of the labelled use of Xtendimax with VaporGrip Technology (e.g., volatility, physical drift, runoff) must be provided to the EPA.
15. Any information or analysis finding that foods/commodities contain dicamba residues that are not covered by a tolerance or exceed established tolerance levels.

Given the high number of alleged dicamba-related adverse incidents reported to EPA in 2017 and 2018 by state lead agencies (SLAs) as well as registrants under FIFRA section 6(a)(2), it is an Agency priority to work with registrants to better understand potential risks and impacts from the use of dicamba on dicamba-tolerant soybean and dicamba-tolerant cotton. The following information, which shall be treated by EPA as confidential business information, is being required to be submitted to the Agency to assist the Agency in making future regulatory decisions regarding these uses.

16. Seed sales information for dicamba tolerant soybean seed and dicamba tolerant cotton seed. This information should include all sales of such seed for planting or planted in the 2017 through 2020 growing seasons and should be categorized by state.
17. Number and type of containers, including volume of material produced by registrant Xtendimax with VaporGrip Technology that were relabeled with the amended labeling approved by the Agency on October 31, 2018. This information should be categorized by the state to which registrant shipped such material.

#### **Additional Data Requirements**

The following additional confirmatory studies are required as a condition of this amended registration. Since these are non-guideline studies, prior to developing a protocol and initiating any study, Bayer CropScience must meet with EPA staff by November 12, 2018 to present and engage in a data quality objective discussion regarding environmental conditions, sampling, and species evaluated. Protocols must be submitted before December 31, 2018 for the Agency's consideration. This work to agree on final protocols will be undertaken on a schedule that recognizes the timing for conducting research during 2019. Field studies must be conducted during the 2019 growing season and final reports must be submitted to the Agency in connection with the January 15, 2020 required reporting submission outlined in Appendix D, Section D.

18. Field studies examining off-site movement of dicamba. Specifically, the study design needs to evaluate impacts on plant height and yield from primary and secondary drift off-target, with transects in all four cardinal directions. These studies should represent varied geographic areas and include locations where high numbers of complaints have been logged and ranges of environmental conditions (e.g., temperature and humidity). Additionally, a study needs to evaluate the effects of dicamba-containing agricultural irrigation water on non-target plants. Data evaluating the response of non-DT soybean or other non-target plants exposed to irrigation water contaminated with dicamba. A consistent protocol is required for all field locations.
19. Studies to investigate temperature effects on volatility of dicamba. The use of humidome studies would allow EPA to evaluate the effects of temperature in a controlled environment for a multitude of temperature, relative humidity, and tank mix pH conditions.
20. Ecological effects data on non-target plants, related to survival, growth and reproduction for select sensitive tree/shrub/woody perennial species. The study design could involve an extended period for consideration of such species.
21. Study which evaluates the effect of pH on secondary movement of dicamba. The analysis should examine variability introduced by tank mix partners and different water conditions on the pH of the mixed material. The study should reflect a variety of water pH throughout the country, particularly in areas with the largest technology adoption and incidents. These tests should examine the pH of the applied solution.

If you fail to satisfy these terms, conditions and data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

Page 7 of 16  
EPA Reg. No. 524-617  
Decision No. 544831

Enclosure

## Appendix A

### Testing of Tank Mix Products for Spray Drift Properties

Products proposed for tank-mixing with may be added to the list of products that will not adversely affect the spray drift properties of Xtendimax™ with VaporGrip™ Technology contained on the web site if a study is performed under the testing conditions set forth below; the test information is reported as set forth below; and the results are interpreted as set forth below and the interpretation supports adding the tested product to the list of products that will not adversely affect the spray drift properties of Xtendimax™ with VaporGrip™ Technology:

#### Testing Conditions

Spray chamber test using conditions described in ASTM E-2798-11; or Wind Tunnel test using conditions described in EPA Final Generic Verification Protocol for Testing Pesticide Application Spray Drift Reduction Technologies for Row and Field Crops (September, 2013)

Testing Media: Xtendimax™ with VaporGrip™ Technology + Xtendimax™ with VaporGrip™ Technology Proposed Tank Mix Product

Test Nozzle: Tee Jet® TTI 11004 at 63 psi

Number of Replicates: 3 for each tested medium

#### Reporting

Validation information as summarized in Appendix B

Full droplet spectrum to be reported for each replicate of each tested medium

Perform AGDISP (8.26) modeling run for each replicate droplet spectrum for each tested medium (AGDISP input parameters described in Appendix C)

Establish 110 foot (0.5 lb ae/A rate) or 220 foot (1.0 lb ae/A rate) spray drift deposition estimates from AGDISP run on each replicate for each tested medium

Establish mean and standard deviation of 110 foot (0.5 lb ae/A rate) or 220 foot (1.0 lb ae/A rate) deposition for the 3 replicates of each tested medium

One-tail (upper bound) t-test ( $p=Q.1$ ) to determine if proposed tank-mix product is above Xtendimax™ with VaporGrip™ Technology 110 foot (0.5 lb ae/A rate) or 220 foot (1.0 lb ae/A rate) spray drift deposition



### Interpretation of Results

If mean 110 foot (0.5 lb ae/A rate) or 220 foot (1.0 lb ae/A rate) deposition for proposed tank-mix product is not statistically greater than mean 110 foot deposition for Xtendimax™ with VaporGrip™ Technology, proposed tank-mix product can be added to the list of products that will not adversely affect the spray drift properties of Xtendimax™ with VaporGrip™ Technology contained on the web site. If mean 110 foot (0.5 lb ae/A rate) or 220 foot (1.0 lb ae/A rate) deposition for proposed tank-mix product is statistically greater than mean 110 foot (0.5 lb ae/A rate) or 220 foot (1.0 lb ae/A rate) deposition for Xtendimax™ with VaporGrip™ Technology, proposed tank-mix product cannot be added to the list of products that will not adversely affect the spray drift properties of Xtendimax™ with VaporGrip™ Technology contained on the web site.

Results from other testing protocols will be acceptable for adding products to the list of products that will not adversely affect the spray drift properties of Xtendimax™ with VaporGrip™ Technology provided that EPA has determined in writing that such other protocol is appropriate for such purpose.

## Appendix B

### Validation Criteria

- a. Detailed information of instrument setting and measurements
  - The distance from the nozzle tips to the laser settings
  - Measurements of airspeed and flow rate of liquid
- b. Detailed information of test substances
  - Volume composition and density of Xtendimax™ with VaporGrip™ Technology formulation and tank mixes
- c. Summary of the entire spray output distribution for each nozzle/tank mixes with statistical analysis of replicates.
- d. Graphical outputs of Sympatec Helos laser diffraction particle size analyzer FOR individual spectrum  
Report of DvO.1 (SD), DvO.5 (SD), and DV0.9 (SD) as well as mean % fines of (< 141pm SD)

## Appendix C

### AGDISP Input Parameters

Parameter	Value	Comments
<b>Application Method Section</b>		
Method	Ground	
Nozzle Type	Flat fan (Default)	The direct use of the DSD overrides the use of “nozzle type”
Boom Pressure	63 psi	If nozzles/tank mixes were tested at 63 psi. It has to be consistent with tank mix as well as Xtendimax™ with VaporGrip™ Technology for both TeeJet® and AIXR nozzles
Release Height	3 ft	Default
Spray Lines	20	Default
<b>Meteorology Section</b>		
Wind Type	Single height	Default
Wind Speed	15 mph	Under bound from label
Wind Direction	-90 deg	Worst-case and default
Temperature	65 F	Default
Relative Humidity	50%	Default
<b>Surface Section</b>		
Angles	0	Default
Canopy	None	Default
Surface Roughness	0.12 ft	Mean of “crops” cover type
<b>Application Technique Section</b>		
Nozzles	54, even spacing	Standard boom setup
DSD	From wind tunnel results, imported in library	
Atmospheric stability	Strong	Default
<b>Swath Section</b>		
Swath width	90 ft	Standard boom
Swath displacement	0 ft	Worst-case
<b>Spray Material Section</b>		
Spray volume rate	10 gal/A	From label
Volatile/nonvolatile fraction	M 1768 at 1.72% v/v	To calculate volatile/nonvolatile fraction in the tank mix for the model input, provide detailed information of the tested formulations and tank mixes. See sample calculation, below <sup>1</sup>
<sup>1</sup> The tested mixture was 1.72% (v/v) M-1768. M-1768 has a density of 10.2 lb/gal and contains 42.8% (w/v) dicamba DGA salt (2.9 lb acid equivalent/gal). For example, a 10-gallon batch would contain the following: M-1768 1.71% * 10 gal = 0.172 gal ; 0.172 gal * 10.2 lb/gal = 1.753 lb Water 10 gal (1280 fl oz) – 22 fl oz = 1258 fl oz = 82.0157 lb Total weight 1.753 lb + 82.016 lb = 83.769 lb Active ingredient fraction: 1.753 lb * 42.8% a.i. = 0.75 lb; 0.75 lb/83.769 lb = 0.00896 (dimensionless) Non-volatile fraction: 0.00896/0.428 = 0.021 (dimensionless)		

## Appendix D

### HERBICIDE RESISTANCE MANAGEMENT PLAN

Bayer CropScience must:

#### A. Field Detection and Remediation Components:

1. Update and implement an education program for growers, as set forth under the “Educational / Informational Component,” below, that identifies appropriate best management practices (BMPs), as set forth under the “Best Management Practices (BMPs) Component,” below, to avoid and control weed resistance, and that conveys to growers the importance of complying with BMPs. Such BMPs shall include that fields must be scouted after application to confirm herbicide effectiveness, and that users should report any incidence of lack of efficacy of this product against a particular weed species to Bayer CropScience or a Bayer CropScience representative.
2. If any grower informs you of a lack of herbicide efficacy, then you or your representative must make an effort to evaluate the field for “likely resistance” to M1768 herbicide for each specific species for which lack of herbicide efficacy is reported by applying the criteria set forth in Norsworthy, *et al.*, “Reducing the Risks of Herbicide Resistance: Best Management Practices and Recommendations,” *Weed Science* 2012 Special Issue:31–62 (*hereinafter* “Norsworthy criteria”)<sup>1</sup> in each specific state until resistance to dicamba is confirmed for a specific weed species in that state using acceptable scientific methods. However, for each grower, you must continue to provide stewardship about resistance management throughout their use of this product. If resistance to dicamba is confirmed in a specific state for a specific weed species, then Bayer must immediately report such confirmation to EPA and need no longer investigate reports of lack of herbicide efficacy regarding that specific species in that specific state, but Bayer must continue to make an effort to help address lack of herbicide efficacy regarding any other weed species in any such state;
3. Keep records of all field evaluations for “likely resistance” for a period of 3 years, and make such copies available to EPA upon request; and
4. If one or more of the Norsworthy criteria are met, then for a weed species not already confirmed to be resistant to dicamba in that specific state, Bayer CropScience will:
  - a. Provide the grower with specific information and recommendations to control and contain likely resistant weeds, including retreatment and/or other non-chemical controls, as appropriate. If requested by the grower, Bayer CropScience or their agent will become actively involved in implementation of weed control measures;
  - b. Request, at the time of the initial determination that one or more of the Norsworthy criteria are met and prior to any application of alternative control practices, that the grower provide you with access to the relevant field(s) to collect specimens of the likely resistant weeds (potted specimens or seeds) for further evaluation in the greenhouse or laboratory, and so collect such specimens if

---

<sup>1</sup> The Norsworthy “likely herbicide resistance” criteria are: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; or (2) a spreading patch of uncontrolled plants of a particular weed species; or (3) surviving plants mixed with controlled individuals of the same species. The identification of any of these criteria in the field indicates that “likely herbicide resistance” is present.

possible (or, alternatively, request that the grower provide such specimens to you, at your expense);

- c. Commence greenhouse or laboratory studies to confirm resistance as soon as practicable following sample collection;
- d. To the extent possible, contact or visit the grower in an appropriate timeframe after implementation of the additional weed control measures in order to evaluate success of such measures; and
- e. If the additional weed control measures were not successful in controlling the likely resistant weeds, then:
  - i. Work with the grower to determine the reason(s) why the additional control measures were not successful;
  - ii. Report annually the inability to control the likely resistant weeds to relevant stakeholders; and
  - iii. Offer to further assist the grower in controlling and containing the likely resistant weeds, including retreatment and/or other non-chemical controls, as appropriate.

**B. Educational / Informational Component:**

- 1. Update and implement an education program for growers that includes the following elements:
  - a. The education program shall identify appropriate best management practices (BMPs), set forth under the “Best Management Practices (BMPs) Component,” below, to avoid and control weed resistance, and shall convey to growers the importance of complying with BMPs;
  - b. The education program shall include at least one written communication regarding herbicide resistance management each year, directed to users of Xtendimax™ with VaporGrip™ Technology for use over-the-top on dicamba tolerant soybean or cotton; and
  - c. You must make the education program available to Bayer CropScience sales representatives for distribution to growers.
- 2. Provide to EPA the original education program within three months of the issuance of this registration.

**C. Evaluation Component:**

- 1. Bayer CropScience will annually conduct a survey directed to users of Xtendimax™ with VaporGrip™ Technology for use over-the-top of dicamba tolerant soybean or cotton. This survey must be based on a statistically representative sample. The sample size and geographical resolution should be adequate to allow analysis of responses within regions, between regions, and across the United States. This survey shall evaluate, at a minimum, the following:

- a. Growers' adherence to the terms of the Xtendimax™ with VaporGrip™ Technology Use Directions and Label Restrictions, and
  - b. Whether growers have encountered any perceived issue with non-performance or lack of efficacy of Xtendimax™ with VaporGrip™ Technology and, if so, how growers have responded.
2. Utilize the results from the survey described in paragraph 1 of this section to annually review, and modify as appropriate for the upcoming growing season, the following:
  - a. Efforts aimed at achieving adoption of BMP's;
  - b. Responses to incidents of likely resistance and confirmed resistance; and
  - c. The education program. At the initiative of either EPA or Bayer CropScience, EPA and Bayer CropScience shall consult about possible modifications of the education program.

**D. Reporting Component:**

1. Submit annual reports to EPA by January 15 of each year, beginning on January 15, 2019. Such reports shall include:
  - a. Annual sales of Xtendimax™ with VaporGrip™ Technology by state;
  - b. The first annual report shall include the current education program and associated materials, and subsequent annual reports shall include updates of any aspect of the education program and associated materials that have materially changed since submission of the previous annual report;
  - c. Summary of your efforts aimed at achieving implementation of BMP's;
  - d. Summary of your determinations as to whether any reported lack of herbicide efficacy was "likely resistance," your follow-up actions taken, and, if available, the ultimate outcome (e.g., evaluation of success of additional weed control measures) regarding each case of "likely resistance." In the annual report, Bayer will list the cases of likely resistance by county and state.
  - e. The results of the annual survey described in paragraph 1 under "Evaluation Component," above, including whether growers are implementing herbicide resistance BMPs, and a summary of your annual review and possible modification – based on that survey – of the education program, , and response to reports of likely resistance, described in paragraph 2 under "Evaluation Component," above; and
  - f. Summary of the status of any laboratory and greenhouse testing performed by, or at the direction of, Bayer CropScience following up on incidents of likely resistance, performed in the previous year. Data pertaining to such testing need not be included in the annual reports, but such data must be made available to EPA upon request.

Following your submission of the annual report, you shall meet with the EPA at EPA's request in order to evaluate and consider the information contained in the report.

**E. Best Management Practices (BMPs) Component:**

1. Best management practices (BMPs) must be identified in your education program. Growers will be advised of BMP's in product literature, educational materials and training. The following are examples of BMPs:

a. Regarding crop selection and cultural practices:

- i. Understand the biology of the weeds present.
- ii. Use a diversified approach toward weed management focused on preventing weed seed production and reducing the number of weed seeds in the soil seed-bank.
- iii. Emphasize cultural practices that suppress weeds by using crop competitiveness.
- iv. Plant into weed free fields, keep fields as weed free as possible, and note areas where weeds were a problem in prior seasons.
- v. Incorporate additional weed control practices whenever possible, such as mechanical cultivation, biological management practices, crop rotation, and weed-free crop seeds, as part of an integrated weed control program.
- vi. Do not allow weed escapes to produce seeds, roots or tubers.
- vii. Manage weed seed at harvest and post-harvest to prevent a buildup of the weed seed-bank.
- viii. Prevent field-to-field and within-field movement of weed seed or vegetative propagules.
- ix. Thoroughly clean plant residues from equipment before leaving fields.
- x. Prevent an influx of weeds into the field by managing field borders.
- xi. Fields must be scouted before application to ensure that herbicides and application rates will be appropriate for the weed species and weed sizes present.
- xii. Fields must be scouted after application to confirm herbicide effectiveness and to detect weed escapes.
- xiii. If resistance is suspected, treat weed escapes with an alternate mode of action or use non-chemical methods to remove escapes.

b. Regarding herbicide selection:

- i. Use a broad spectrum soil applied herbicide with a mechanism of action that differs from this product as a foundation in a weed control program.
- ii. A broad spectrum weed control program should consider all of the weeds present in the field. Weeds should be identified through scouting and field history.

- iii. Difficult to control weeds may require sequential applications of herbicides with alternative mechanisms of action.
- iv. Fields with difficult to control weeds should be rotated to crops that allow the use of herbicides with alternative mechanisms of action.
- v. Apply full rates of this herbicide for the most difficult to control weed in the field. Applications should be made when weeds are at the correct size to minimize weed escapes.
- vi. Do not use more than two applications of this herbicide or any herbicide with the same mechanism of action within a single growing season unless mixed with another mechanism of action herbicide with overlapping spectrum for the difficult to control weeds.
- vii. Report any incidence of lack of efficacy of this product against a particular weed species to Bayer CropScience or a Bayer CropScience representative.

This list may be updated or revised as new information becomes available



MASTER LABEL FOR EPA REG. NO. 524-617

**RESTRICTED USE PESTICIDE**

For retail sale to and use only by Certified Applicators

This labeling expires on 12/20/2020. Do not use or distribute this product after 12/20/2020.

Primary Brand Name:  
**M1768 Herbicide**

Alternate Brand Name:  
**XtendiMax® With VaporGrip® Technology**

**ACCEPTED**

**11/01/2018**

Under the Federal Insecticide, Fungicide  
and Rodenticide Act as amended, for the  
pesticide registered under  
EPA Reg. No. 524-617

DICAMBA

GROUP

4

HERBICIDE

**ACTIVE INGREDIENT:**

Diglycolamine salt of dicamba (3,6-dichloro-*o*-anisic acid)\* ..... 42.8%

OTHER INGREDIENTS: ..... 57.2%

**TOTAL:** ..... 100.0%

\* contains 29.0%, 3,6-dichloro-*o*-anisic acid (2.9 pounds acid equivalent per U.S. gallon or 350 grams per liter).

## RESTRICTED USE PESTICIDE

For retail sale to and use only by Certified Applicators

### **XtendiMax® With VaporGrip® Technology**

#### **Complete Directions for Use**

This labeling expires on 12/20/2020. Do not use or distribute this product after 12/20/2020.

EPA Reg. Number: 524-617

**For weed control in asparagus, conservation reserve programs, corn, cotton, fallow croplands, general farmstead (noncropland), sorghum, grass grown for seed, hay, proso millet, pasture, rangeland, small grains, sod farms and farmstead turf, soybean, sugarcane, cotton with XtendFlex Technology, Roundup Ready 2 Xtend Soybean, and XtendFlex Soybean.**

DICAMBA	GROUP	4	HERBICIDE
---------	-------	---	-----------

**This label supersedes any previously issued labeling for this product, including previously issued supplemental labeling.**

**XtendiMax® With VaporGrip® Technology** is approved by U.S. EPA for all uses specified on this label in the following states, subject to county restriction as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Check the registration status of each product in each state before using.

**READ THE ENTIRE LABEL FOR XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY  
BEFORE PROCEEDING WITH THE USE DIRECTIONS CONTAINED IN THIS LABEL**

**READ AND FOLLOW ALL APPLICABLE DIRECTIONS, RESTRICTIONS, AND PRECAUTIONS ON THE  
CONTAINER LABEL AND BOOKLET AND [WWW.XTENDIMAXAPPLICATIONREQUIREMENTS.COM](http://WWW.XTENDIMAXAPPLICATIONREQUIREMENTS.COM).**

Read the "LIMIT OF WARRANTY AND LIABILITY" statement at the end of the label before buying or using. If terms are not acceptable, return at once unopened.

Net contents:

EPA Establishment No.:

## CONTENTS

<b>1.0</b>	<b>INGREDIENTS</b>	<b>4</b>
<b>2.0</b>	<b>IMPORTANT PHONE NUMBERS</b>	<b>4</b>
<b>3.0</b>	<b>PRECAUTIONARY STATEMENTS</b>	<b>4</b>
3.1	Hazards to Humans and Domestic Animals	4
3.2	Environmental Hazards	5
3.3	Physical or Chemical Hazards	6
<b>4.0</b>	<b>DIRECTIONS FOR USE</b>	<b>6</b>
4.1	Training	7
4.2	Record Keeping	7
<b>5.0</b>	<b>STORAGE AND DISPOSAL</b>	<b>9</b>
5.1	Pesticide Storage	9
5.2	Pesticide Disposal	9
5.3	Container Handling and Disposal	10
<b>6.0</b>	<b>PRODUCT INFORMATION</b>	<b>12</b>
6.1	Restrictions	13
<b>7.0</b>	<b>WEED RESISTANCE MANAGEMENT</b>	<b>14</b>
7.1	Weed Management Practices	14
7.2	Management of Dicamba-Resistant Biotypes	15
<b>8.0</b>	<b>TANK MIXING INSTRUCTIONS</b>	<b>15</b>
8.1	Compatibility Test for Mix Components	16
8.2	Mixing Order	16
8.3	Adjuvants, Drift Reducing Adjuvants, Surfactants, and Other Tank Mixed Products	17
<b>9.0</b>	<b>APPLICATION EQUIPMENT AND TECHNIQUES</b>	<b>17</b>
9.1	Spray Drift Management	18
9.1.1	Sprayer Setup	18
9.1.2	Temperature and Humidity	19
9.1.3	Temperature Inversions	19
9.1.4	Buffer Requirements and Protection of Sensitive Crops	19
9.1.4.a.	Buffer Requirement	19
9.1.4.b.	Sensitive Crops	20
9.1.5	Application Awareness	21
9.2	Ground Application (Banding)	21
9.3	Ground Application (Broadcast)	21
9.4	Ground Application (Wipers)	21
9.5	Proper Spray System Equipment Cleanout	21
<b>10.0</b>	<b>ADDITIONAL RESTRICTIONS</b>	<b>22</b>
<b>11.0</b>	<b>CROP-SPECIFIC INFORMATION</b>	<b>25</b>
11.1	Asparagus	25
11.2	Between Crop Applications	25
11.3	Conservation Reserve Program (CRP)	26
11.4	Corn (Field, Pop, Seed, And Silage)	26
11.5	Cotton	27
11.6	Grass Grown For Seed	28
11.7	Proso Millet	28
11.8	Pasture, Hay, Rangeland, And General Farmstead (Noncropland)	28
11.9	<b>SMALL GRAINS</b>	<b>30</b>
11.9.1	Small Grains Not Underseeded To Legumes (fall- and spring-seeded barley, oat, triticale and wheat)	30
11.9.2	Small Grains: Barley (fall- and spring-seeded)	30
11.9.3	Small Grains: Oats (fall- and spring-seeded)	31
11.9.4	Small Grains: Triticale (fall- and spring-seeded)	31
11.9.5	Small Grains: Wheat (fall- and spring-seeded)	31
11.10	Sorghum	32
11.11	Soybean	33
11.12	Sugarcane	33

11.13	Farmstead Turf (noncropland) and Sod Farms .....	34
<b>12.0</b>	<b>CROPS WITH XTEND® TECHNOLOGY.....</b>	<b>34</b>
12.1	Cotton with XtendFlex® Technology .....	35
12.2	Roundup Ready 2 Xtend® Soybean and XtendFlex® Soybean .....	36
<b>13.0</b>	<b>WEEDS CONTROLLED .....</b>	<b>38</b>
<b>14.0</b>	<b>LIMIT OF WARRANTY AND LIABILITY.....</b>	<b>39</b>
<b>1.0</b>	<b>INGREDIENTS</b>	

#### ACTIVE INGREDIENT:

Diglycolamine salt of dicamba (3,6-dichloro-*o*-anisic acid)\* ..... 42.8%

OTHER INGREDIENTS: ..... 57.2%

**TOTAL:** ..... 100.0%

\* contains 29.0%, 3,6-dichloro-*o*-anisic acid (2.9 pounds acid equivalent per U.S. gallon or 350 grams per liter).

DICAMBA	GROUP	4	HERBICIDE
---------	-------	---	-----------

#### 2.0 IMPORTANT PHONE NUMBERS

1. FOR PRODUCT INFORMATION OR ASSISTANCE IN USING THIS PRODUCT, CALL TOLL-FREE, 1-800-332-3111.
2. IN CASE OF AN EMERGENCY INVOLVING THIS HERBICIDE PRODUCT, OR FOR MEDICAL ASSISTANCE, CALL COLLECT, DAY OR NIGHT, (314)-694-4000.

#### IN CASE OF SPILL:

##### Steps to be taken in case material is released or spilled:

Dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal. Remove contaminated clothing, and wash affected skin areas with soap and water. Wash clothing before re-use. Keep the spill out of all sewers and open bodies of water.

#### 3.0 PRECAUTIONARY STATEMENTS

##### 3.1 Hazards to Humans and Domestic Animals

Keep out of reach of children.

#### CAUTION!

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

FIRST AID	
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> </ul>

	<ul style="list-style-type: none"> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<ul style="list-style-type: none"> <li>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</li> <li>You can call <b>(314) 694-4000</b>, collect day or night, for emergency medical treatment information.</li> <li>This product is identified as <b>XtendiMax® With VaporGrip® Technology, EPA Registration No. 524-617.</b></li> </ul>	

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

**All mixers, loaders, applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

See "Engineering Controls Statement" for additional requirements.

Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

## ENGINEERING CONTROLS STATEMENT

When handlers use closed systems, or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**IMPORTANT:** When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "all mixers, loaders, applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

### USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## 3.2 Environmental Hazards

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate. Apply this product only as directed on the label.

This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

## Ground and Surface Water Protection

**Point source contamination** - To prevent point source contamination, do not mix or load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. Do not apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas as described below.

Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or move across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or container leaks, equipment wash waters, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Care must be taken when using this product to prevent: a) back siphoning into wells, b) spills or c) improper disposal of excess pesticide, spray mixtures or rinsates. Check valves or anti-siphoning devices must be used on all mixing equipment.

**Movement by surface runoff or through soil** - Do not apply under conditions which favor runoff. Do not apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for ground water contamination. Ground water contamination may occur in areas where soils are permeable or coarse and ground water is near the surface. Do not apply to soils classified as sand with less than 3% organic matter and where ground water depth is shallow. To minimize the possibility of ground water contamination, carefully follow application rate recommendations as affected by soil type in the Crop Specific Information section of this label.

**Movement by water erosion of treated soil** - Do not apply or incorporate this product through any type of irrigation equipment nor by flood or furrow irrigation. Ensure treated areas have received at least one-half inch rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

### Endangered Species Concerns

Use of this product in a manner inconsistent with its labeling may pose a hazard to endangered or threatened species. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product. To obtain Bulletins, no more than six months before using this product, consult <https://www.epa.gov/endangered-species> or call 1-844-447-3813. You must use the Bulletin valid for the month in which you will apply the product.

It is a Federal offense to use any pesticide in a manner that results in the death of an endangered species.

## 3.3 Physical or Chemical Hazards

Do not store or heat near oxidizing agents, hazardous chemical reaction may occur.

---

## 4.0 DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This product can only be used in accordance with the Directions for Use on this label. This labeling must be in the user's possession during application.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulations.

This is a restricted use pesticide.

#### 4.1 Training

Prior to applying this product in the 2019 growing season and each growing season thereafter, all applicator(s) applying this product must complete dicamba or auxin-specific training. If training is available and required by the state where the applicator intends to apply this product, the applicator must complete that training. If the state where the application is intended does not require auxin or dicamba-specific training, then the applicator must complete dicamba or auxin-specific training provided by one of the following sources: a) a registrant of a dicamba product approved for in-crop use with dicamba-tolerant crops, or b) a state or state-authorized provider.

#### 4.2 Record Keeping

Record keeping is required for applications of this product. **The certified applicator must keep the following records for a period of two years;** records must be generated as soon as practical but no later than 72 hours after application and a record must be kept for each application of Xtendimax with VaporGrip Technology. Records must be made available to State Pesticide Control Official(s), USDA, and EPA upon request. An example form summarizing record keeping requirements can be found on [www.xtendimaxapplicationrequirements.com](http://www.xtendimaxapplicationrequirements.com).

1. All Items required by 7 CFR Part 110 (RECORDKEEPING ON RESTRICTED USE PESTICIDES BY CERTIFIED APPLICATORS) including:
  - a. The brand or product name
  - b. The EPA registration number
  - c. The total amount applied
  - d. The month, day, and year of application
  - e. The location of the application
  - f. The crop, commodity, stored product, or site of application
  - g. The size of treated area
  - h. The name of the certified applicator
  - i. The certification number of the certified applicator
2. Training: Date and provider of required training completed and proof of completion.
3. Receipts of Purchase: Receipts or copies for the purchase of this product.
4. Product Label: A copy of this product label, and any state special local needs label that supplements this label.
5. Crop Planting Date: Record of the date at which the crop was planted.
6. Buffer Requirement: Record of the buffer distance calculation and any areas included within the buffer distance calculations as allowed in Section 9.1.4.a.
7. Sensitive Crops Awareness: Record that a sensitive crop registry was consulted and survey adjacent fields documenting the crops/areas surrounding the field prior to application. At a minimum, records must include the name of the sensitive crop registry and the date it was consulted and documentation of adjacent crops/areas and the date the survey was conducted (read Section 9.1.4.b for additional information).
8. Start and Finish Times of Each Application: Record of the time at which the application started and the time when the application finished.
9. Application Timing: Record of the type of application (for example: pre-emergence, post-emergence) and number of days after planting if post-emergence.
10. Air Temperature: Record of the air temperature in degrees Fahrenheit at the start and completion of each application.

11. Wind Speed and Direction: Record of the wind speed and direction (the direction from which the wind is blowing) at boom height at the start and completion of each application of this product (Read Section 9.1.1 for information on wind speed).
12. Nozzle and Pressure: Record of the spray nozzle manufacturer/brand, type, orifice size, and operating pressure used during each application of this product (Read Section 9.1.1 for information on nozzles and pressures.)
13. Tank Mix Products: Record of the brand names and EPA registration numbers (if available) for all products (pesticides, adjuvants, and other products) that were tank mixed with this product for each application (Read Section 8.0 for more information on tank mixing.)
14. Spray System Cleanout: Record of compliance with the section of this label titled Section 9.5: Proper Spray System Equipment Cleanout. At a minimum, records must include the confirmation that the spray system was clean before using this product and that the post-application cleanout was completed in accordance with Section 9.5.



### **AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE), and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the WPS.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as, plants, soil, or water is:

- Coveralls worn over short-sleeved shirt and short pants
- Chemical-resistant footwear plus socks
- Waterproof gloves
- Chemical-resistant headgear for overhead exposure
- Protective eyewear

### **NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter or allow people (or pets) to enter the treated area until sprays have dried. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Do not enter or allow other people or pets to enter until sprays have dried.

## **5.0 STORAGE AND DISPOSAL**

Proper pesticide storage and disposal are essential to protect against exposure to people and the environment due to leaks and spills, excess product or waste, and vandalism. Do not allow this product to contaminate water, foodstuffs, feed or seed by storage and disposal. Open dumping is prohibited. This product may not be mixed, loaded, or used within 50 feet of all wells including abandoned wells, drainage wells, and sinkholes. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas as described above

### **5.1 Pesticide Storage**

Groundwater contamination may be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material. Spillage or leakage should be contained and absorbed with clay granules, sawdust, or equivalent material for disposal.

Store in original container in a well-ventilated and away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Avoid cross-contamination with other pesticides. Keep container closed to prevent spills and contamination.

### **5.2 Pesticide Disposal**

To avoid wastes, use all material in this container, including rinsate, by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide

disposal program. Such programs are often run by state or local governments or by industry. All disposal must be in accordance with applicable federal, state and local regulations and procedures.

[*Alternate PESTICIDE DISPOSAL statement for transport vehicles only:* To avoid wastes, empty as much product from this transport vehicle as possible for repackaging or use in accordance with label directions. If wastes cannot be avoided, offer remaining product or rinsate to a waste disposal facility or pesticide disposal program. All disposal must be in accordance with applicable federal, state and local regulations and procedures.]

### 5.3 Container Handling and Disposal

[*Optional label statement if applicable:* See container label for container handling and disposal instructions and refilling limitations.]

#### [CONTAINER HANDLING AND DISPOSAL STATEMENTS AND REFILLING LIMITATIONS FOR CONTAINER LABELS]

##### [CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID CONTAINERS OF LESS THAN 1-GALLON CAPACITY]

Nonrefillable container. Do not reuse or refill this container.

[*Alternate container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Then offer this container for recycling, if available. If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*Alternate container disposal statement:* Once properly rinsed, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or Monsanto at 1-800-ROUNDUP (1-800-768-6387). If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.]

##### [CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 2.5-GALLON CONTAINERS AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 1-GALLON BUT EQUAL TO OR LESS THAN 5-GALLON CAPACITY]

Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state.

[*Alternate container statement:* Nonrefillable container. Do not reuse or refill this container.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container  $\frac{1}{4}$  full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. [*Optional container disposal statement:* To find the nearest site, contact your chemical dealer or Monsanto at 1-800-ROUNDUP (1-800-768-6387)]. If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

[*Alternate container disposal statement:* Then offer this container for recycling, if available. If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.]

**[CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR NONREFILLABLE RIGID PLASTIC 30-GALLON CONTAINERS AND OTHER NONREFILLABLE CONTAINERS OF GREATER THAN 5-GALLON CAPACITY]**

Nonrefillable container. Do not reuse or refill this container.

[*Alternate container statement:* Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state.]

Triple rinse or pressure rinse (or equivalent) this container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container  $\frac{1}{4}$  full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Once properly rinsed, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. [*Alternate container disposal statement:* To find the nearest site, contact your chemical dealer or Monsanto at 1-800-ROUNDUP (1-800-768-6387)]. If recycling is not available,

dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.

*[Alternate container disposal statement:* Then offer the container for recycling, if available. If recycling is not available, dispose of in accordance with federal, state and local regulations and procedures, which may include puncturing the properly rinsed container and disposing in a sanitary landfill.]

*[Optional container label statement:* Return Properly Rinsed Container to Monsanto for Recycling Contact: 1-800-ROUNDUP (1-800-768-6387)]

**[CONTAINER HANDLING AND DISPOSAL STATEMENT AND REFILLING LIMITATION FOR ALL REFILLABLE CONTAINERS, EXCEPT TRANSPORT VEHICLES]**

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning this container before refilling is the responsibility of the refiller. Cleaning this container before final disposal is the responsibility of the person disposing of the container.

To clean this container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer this container for recycling, if available.

*[Optional container disposal statement:* To obtain information about recycling refillable containers, contact Monsanto Company at 1-800-ROUNDUP (1-800-768-6387)]

*[Optional container label statement:* Return Properly Rinsed Container to Monsanto for Recycling, Call 1-800-ROUNDUP (1-800-768-6387)]

**[CONTAINER HANDLING AND DISPOSAL STATEMENT FOR ALL TRANSPORT VEHICLES AS DEFINED IN 40 CFR 156.3]**

**THIS LABEL FOR USE WITH TRANSPORT VEHICLES ONLY**

Emptied container retains vapor and product residue. Observe all precautions stated on this label until the container is cleaned, reconditioned or destroyed. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, and worn-out threads and closures. Clean thoroughly before reuse for transportation of a material of different composition or before retiring this transport vehicle from service.

*[Alternative label statement:* NET CONTENTS: See Bill of Lading]

*[Alternative label statement:* LOT: See Bill of Lading]

*[Alternative label statement:* For Net Contents and Lot Number, see Bill of Lading]

**6.0 PRODUCT INFORMATION**

XtendiMax® With VaporGrip® Technology is approved by U.S. EPA for all uses specified on this label in the following states, subject to county restriction as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin.

Additional state restrictions and requirements may apply. The applicator must comply with any additional state requirements and restrictions.

This product is a water-soluble formulation intended for control and suppression of many annual, biennials, and perennial broadleaf weeds, as well as woody brush and vines listed in the WEEDS CONTROLLED section of this label. This product may be used for control of these weeds in asparagus, corn, cotton, conservation reserve programs, fallow cropland, grass grown for seed, hay, proso millet, pasture, rangeland, general farmstead (noncropland), small grains, sod farms and farmstead turf, sorghum, soybean, sugarcane, Cotton with XtendFlex Technology, Roundup Ready 2 Xtend Soybean, and XtendFlex Soybean.

XtendiMax® With VaporGrip® Technology is a contact, systemic herbicide, which can have moderate residual control on small seeded broadleaf weeds, including waterhemp, lambsquarters and Palmer pigweed, depending on rainfall and soil type.

XtendiMax® With VaporGrip® Technology is readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. XtendiMax® With VaporGrip® Technology interferes with the plant's growth hormones (auxins) resulting in death of many broadleaf weeds.

Failure to properly clean the entire spray system can result in inadvertent contamination of the spray system. You must ensure that the spray system used to apply this product is clean before using this product.

**Rainfast period:** Rainfall or irrigation occurring within 4 hours after postemergence applications may reduce the effectiveness of this product.

Refer to the CROP-SPECIFIC INFORMATION and CROPS WITH XTEND TECHNOLOGY sections for application timing and other crop-specific details.

## 6.1 Restrictions

The applicator must read the entire label, including product labeling and follow all restrictions for XtendiMax® With VaporGrip® Technology. Restrictions included, but are not limited to:

- DO NOT APPLY THIS PRODUCT AERIALLY.
- DO NOT TANK MIX WITH PRODUCTS CONTAINING AMMONIUM SALTS SUCH AS AMMONIUM SULFATE (AMS) AND UREA AMMONIUM NITRATE. Small quantities of AMS can greatly increase the volatility potential of dicamba. Read the TANK MIXING INSTRUCTIONS of this label (Section 8.0) for instructions regarding other tank mix products.
- DO NOT APPLY TO CROPS UNDER STRESS DUE TO LACK OF MOISTURE, HAIL DAMAGE, FLOODING, HERBICIDE INJURY, MECHANICAL INJURY, INSECTS, OR WIDELY FLUCTUATING TEMPERATURES AS INJURY MAY RESULT.
- DO NOT APPLY THROUGH ANY TYPE OF IRRIGATION EQUIPMENT. DO NOT TREAT IRRIGATION DITCHES OR WATER USED FOR CROP IRRIGATION OR DOMESTIC PURPOSES.

- DO NOT MAKE APPLICATION OF THIS PRODUCT IF RAIN THAT MAY EXCEED SOIL FIELD CAPACITY AND RESULT IN SOIL RUNOFF IS EXPECTED IN THE NEXT 24 HOURS

Review the entire label including, specific crop use direction sections for additional restrictions.

## 7.0 WEED RESISTANCE MANAGEMENT

DICAMBA	GROUP	4	HERBICIDE
---------	-------	---	-----------

Dicamba mimics auxin (a plant hormone) resulting in a hormone imbalance in sensitive plants that interferes with normal cell division, cell enlargement, and protein synthesis. Dicamba active ingredient is a Group 4 herbicide based on the mode of action classification system of the Weed Science Society of America. Any weed population can contain plants naturally resistant to Group 4 herbicides. Weed species resistant to Group 4 herbicides can be effectively managed utilizing another herbicide from a different Group, or by using other cultural or mechanical practices.

### 7.1 Weed Management Practices

Certain agronomic practices can delay or reduce the likelihood that resistant weed populations will develop and can be utilized to manage weed resistance once it occurs.

Do not use less than the labeled rate of this product in a single application. Using the appropriate application rate can minimize the selection for resistant weeds.

Proactively implementing diversified weed control strategies to minimize selection for weed populations resistant to one or more herbicides is a best practice. A diversified weed management program may include the use of multiple herbicides with different sites of action and overlapping weed spectrum with or without tillage operations and/or other cultural practices. Research has demonstrated that using the labeled rate and directions for use is important to delay the selection for resistance.

The continued effectiveness of this product depends on the successful implementation of a weed resistance management program.

To aid in the prevention of developing weeds resistant to this product:

- Scout fields before application to ensure herbicides and rates will be appropriate for the weed species and weed sizes present.
- Start with a clean field, using either a burndown herbicide application or tillage.
- Control weeds early when they are relatively small (less than 4 inches).
- Apply full rates of XtendiMax® With VaporGrip® Technology for the most difficult to control weed in the field at the specified time (correct weed size) to minimize weed escapes.
- Avoid tank mixtures with other herbicides that reduce the efficacy of this product (through antagonism), or with ones that encourage application rates of this product below those specified on this label.
- Scout fields after application to detect weed escapes or shifts in weed species.
- Control weed escapes before they reproduce by seed or proliferate vegetatively.
- Report any incidence of non-performance of this product against a particular weed species to your Monsanto retailer or representative or call 1-844-RRXTEND (1-844-779-8363).
- If resistance is suspected, treat weed escapes with an herbicide having a site of action other than Group 4 and/or use non-chemical methods to remove escapes, as practical, with the goal of preventing further seed production. EPA defines suspected herbicide resistance as the situation where the following three indicators occur at a site or location:

- Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
- A spreading patch of non-controlled plants of a particular weed species; and
- Surviving plants mixed with controlled individuals of the same species.

Additionally, users should follow as many of the following herbicide resistance management practices as is practical:

- Use a broad spectrum soil-applied herbicide with other sites of action as a foundation in a weed control program.
- Utilize sequential applications of herbicides with alternative sites of action.
- Rotate the use of this product with non-Group 4 herbicides.
- Avoid making more than two applications of dicamba and any other Group 4 herbicides within a single growing season unless mixed with an herbicide with a different mechanism of action with an overlapping spectrum for the difficult to control weeds.
- Incorporate non-chemical weed control practices, such as mechanical cultivation, crop rotation, cover crops and weed-free crop seeds, as part of an integrated weed control program.
- Use good agronomic principles that enhance crop development and crop competitiveness.
- Thoroughly clean plant residues from equipment before leaving fields suspected to contain resistant weeds.
- Manage weeds in and around fields, during and after harvest to reduce weed seed production.

Contact the local agricultural extension service, Monsanto representative, agricultural retailer or crop consultant for further guidance on weed control practices as needed.

## 7.2 Management of Dicamba-Resistant Biotypes

Appropriate testing is critical in order to determine if a weed is resistant to dicamba. Contact your Monsanto representative to determine if resistance in any particular weed biotype has been confirmed in your area, or visit on the Internet [www.weedresistancemanagement.com](http://www.weedresistancemanagement.com) or [www.weedscience.org](http://www.weedscience.org).

Monsanto Company is not responsible for any losses that result from the failure of this product to control dicamba-resistant weed biotypes.

The following good agronomic practices can reduce the spread of confirmed dicamba-resistant biotypes:

- If a naturally occurring resistant biotype is present in your field, this product may be tank-mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control (read Section 8.0 for more information on tank mixing).
- Cultural and mechanical control practices (e.g., crop rotation or tillage) can also be used as appropriate.
- Scout treated fields after herbicide application and control weed escapes, including resistant biotypes, before they set seed.
- Thoroughly clean equipment, as practical, for all weed seeds before leaving fields known to contain resistant biotypes.

## 8.0 TANK MIXING INSTRUCTIONS

Auxin herbicides such as dicamba have the potential to volatilize in lower pH spray mixtures. Knowing the pH of your spray mixture and making the appropriate adjustments to avoid a low pH spray mixture (e.g., pH less than 5) can reduce the potential for volatilization to occur. Talk to your local agricultural consultant, extension agent, or Bayer representative for recommendations to prevent low pH spray mixtures.

XtendiMax® With VaporGrip® Technology may only be tank-mixed with products that have been tested and found not to adversely affect the offsite movement potential of XtendiMax® With VaporGrip® Technology. The applicator must check the website found at [www.xtendimaxapplicationrequirements.com](http://www.xtendimaxapplicationrequirements.com) no more than 7 days before applying XtendiMax® With VaporGrip® Technology.

DO NOT tank mix any product with XtendiMax® With VaporGrip® Technology unless:

1. The intended tank-mix product is identified on the list of tested products found at [www.xtendimaxapplicationrequirements.com](http://www.xtendimaxapplicationrequirements.com);
2. The intended products are not prohibited on either this label or the label of the tank mix product; and
3. All requirements and restrictions on [www.xtendimaxapplicationrequirements.com](http://www.xtendimaxapplicationrequirements.com) are followed.

---

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MONSANTO MAKES NO RECOMMENDATION OR WARRANTY HEREIN REGARDING THE USE OF ANY PRODUCT THAT MAY APPEAR ON THE WEBSITE REFERENCED ABOVE, REGARDLESS OF WHETHER SUCH PRODUCT IS USED ALONE OR IN A TANK MIX WITH XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY. BUYER AND ALL USERS ARE SOLELY RESPONSIBLE FOR ANY LACK OF PERFORMANCE, LOSS, OR DAMAGE IN CONNECTION WITH THE USE OR HANDLING OF ANY SUCH PRODUCT ALONE OR IN A TANK MIX WITH XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY. See the section titled "LIMIT OF WARRANTY AND LIABILITY" herein for more information.

---

### 8.1 Compatibility Test for Mix Components

Before mixing components, always perform a compatibility jar test.

- For 15 gallons per acre spray volume, use 2.5 cups (591.5 mL) of water. For other spray volumes, adjust rates accordingly. Only use water from the intended source at the source temperature.
- Add components in the sequence indicated in the Mixing Order section below using 2 teaspoons for each pound or 1 teaspoon for each pint of labeled use rate per acre.
- Cap the jar and invert 10 cycles between component additions.
- When the components have all been added to the jar, let the solution stand for 15 minutes.
- Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface; fine particles that precipitate to the bottom; or thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the compatibility agent as directed on its label. If the solution is still incompatible, then do not mix the ingredients in the same tank.

### 8.2 Mixing Order

Only use approved tank mix products as directed on [www.xtendimaxapplicationrequirements.com](http://www.xtendimaxapplicationrequirements.com). Always read and follow label directions for all products in the tank mixture. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. See section 8.0 for additional restrictions on tank mixing.

1. Ensure application and mixing equipment are clean and in proper working order
2. Water - Begin by agitating a thoroughly **clean sprayer** tank three-quarters full of clean water.
3. Agitation - Maintain constant agitation throughout mixing and application.



4. Drift Reducing Adjuvants (DRA)-(when applicable)
5. Inductor - If an inductor is used, rinse it thoroughly after each component has been added.
6. Products in PVA bags - Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
7. Water-dispersible products (dry flowables, wettable powders, suspension concentrates, or suspo-emulsions)
8. Water-soluble products (such as XtendiMax® With VaporGrip® Technology)
9. Emulsifiable concentrates (such as oil concentrate when applicable)
10. Water-soluble additives (when applicable)
11. Add remaining quantity of water.

Maintain constant agitation during application

### 8.3 Adjuvants, Drift Reducing Adjuvants, Surfactants, and Other Tank Mixed Products

See Section 8.0 TANK MIXING INSTRUCTIONS for tank mixing instructions for adjuvants, drift reducing adjuvants, surfactants, and other tank mixed products.

## 9.0 APPLICATION EQUIPMENT AND TECHNIQUES

DO NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT.

XtendiMax® With VaporGrip® Technology can be applied to actively growing weeds as broadcast, band, or spot spray applications using water as a carrier. For best results, treat weeds early when they are relatively small (less than 4 inches). Timely application to small weeds early in the season will improve control and reduce weed competition. Refer to Table 1 for XtendiMax® With VaporGrip® Technology application rates for control or suppression by weed type and growth stage. For crop-specific application timing and other details, refer to the CROP-SPECIFIC INFORMATION section of this label.

APPLY THIS PRODUCT USING PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING THE REQUIRED VOLUMES.

Using a hooded sprayer or other drift reduction technology in combination with approved nozzles may further reduce drift potential.

**Cultivation:** Do not cultivate within 7 days after applying this product.

**Table 1. XtendiMax® With VaporGrip® Technology Application Rates for Control or Suppression by Weed Type and Growth Stage**

Use rate limitations are given in sections 10 (RESTRICTIONS), 11 (CROP-SPECIFIC INFORMATION), and 12 (CROPS WITH XTEND TECHNOLOGY)

Weed Type and Stage	Rate Per Acre	Weed Type and Stage	Rate Per Acre
<b>Annual<sup>1</sup></b>		<b>Perennial</b>	
Small, actively growing	11 – 22 fluid ounces	Top growth suppression	11 – 22 fluid ounces
Established weed growth	22 – 33 fluid ounces	Top growth control and root suppression	22 – 44 fluid ounces
		Noted perennials (footnote 1 in Section 13.0).	44 fluid ounces
		Other perennials (without footnote 1 in Section	44 fluid ounces

		13.0) <sup>3</sup>	
<b>Biennial</b> Rosette diameter 1 – 3 inches Rosette diameter 3 inches or more  Bolting	11 – 22 fluid ounces 22 – 44 fluid ounces  44 fluid ounces	<b>Woody Brush &amp; Vines</b> Top growth suppression Top growth control <sup>2,3</sup> Stems and stem suppression <sup>3</sup>	22 – 44 fluid ounces 44 fluid ounces 44 fluid ounces
<sup>1</sup> Rates below 11 fluid ounces per acre may provide control or suppression but should typically be applied with other herbicides that are effective on the same species and biotype. <sup>2</sup> Woody Species listed in section 13.0 may require tank mixes for adequate top growth control. <sup>3</sup> DO NOT broadcast apply more than 44 ounces per acre for a single application and DO NOT exceed broadcast applications of more than 88 ounces per acre within the growing season when a sequential application is needed for control. Use the higher rate when treating dense vegetation or perennial weeds with established root growth. Perennials and Woody Species are defined as those listed in Section 13.0.			

## 9.1 Spray Drift Management

Do not allow herbicide solution to mist, drip, drift or splash onto desirable vegetation because severe injury or destruction to desirable broadleaf plants could result.

The most effective way to reduce drift potential is to apply large droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if the application is made improperly, or under unfavorable environmental conditions (see the “**Temperature and Humidity**” and “**Temperature Inversions**” sections of this label).

### 9.1.1 Sprayer Setup

The following sprayer setup requirements for drift management must be followed:

- **Nozzle type.** The applicator must use an approved nozzle within a specified pressure range as found at [www.xtendimaxapplicationrequirements.com](http://www.xtendimaxapplicationrequirements.com) when applying XtendiMax® With VaporGrip® Technology. Do not use any other nozzle and pressure combination not specifically listed on this website.
- **Spray Volume.** The applicator must apply this product in a **minimum of 15 gallons of spray solution per acre**. See Section 8.0 for information on approved tank mix products.
- **Equipment Ground Speed.** Do not exceed a **ground speed of 15 miles per hour**. Select a ground speed that will deliver the desired spray volume while maintaining the desired spray pressure, but slower speeds generally result in better spray coverage and deposition on the target area. Provided the applicator can maintain the required nozzle pressure, it is recommended that tractor speed is reduced to 5 miles per hour at field edges.
- **Spray boom Height.** Do not exceed a **boom height of 24 inches** above target pest or crop canopy. Excessive boom height will increase the drift potential.
- **Wind Speed.** Do not apply when wind speeds are **less than 3 MPH or greater than 10 MPH**. Only apply when wind speed at boom height is between 3 and 10 mph.

### 9.1.2 Temperature and Humidity

When making applications in low relative humidity or temperatures above 91 degrees Fahrenheit, set up equipment to produce larger droplets to compensate for evaporation (for example: increase orifice size and/or increase spray volume as directed on [www.xtendimaxapplicationrequirements.com](http://www.xtendimaxapplicationrequirements.com)). Larger droplets have a lower surface to volume ratio and can be impacted less by temperature and humidity. Droplet evaporation is most severe when conditions are both hot and dry.

### 9.1.3 Temperature Inversions

Do not apply this product during a temperature inversion as the off-target movement potential is high. In general, temperature inversions are more likely during nighttime hours. Applications of this product may ONLY occur one hour after sunrise though two hours before sunset.

- During a temperature inversion, the atmosphere is very stable and vertical air mixing is restricted, which can cause small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light, variable winds common during inversions.
- Temperature inversions can be characterized by increasing temperatures with altitude and can be common on evenings and nights with limited cloud cover and light to no wind. Cooling of air at the earth's surface takes place and warmer air is trapped above it. Temperature inversions can begin to form as the sun sets and often continue into the morning.
- Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.
- The inversion will typically dissipate with increased winds (above 3 miles per hour) or at sunrise when the surface air begins to warm (generally 3°F from morning low).

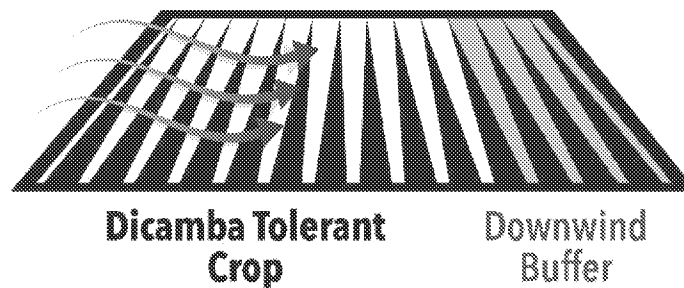
### 9.1.4 Buffer Requirements and Protection of Sensitive Crops

**Do not apply under circumstances where drift may occur to food, forage, or other plantings that might be damaged or the crops rendered unfit for sale, use, or consumption.**

#### 9.1.4.a. Buffer Requirement

The applicator **must always maintain** a 110 foot downwind buffer (when applying up to 22 fluid ounces of this product per acre) or a 220 foot downwind buffer (when applying greater than 22 up to 44 fluid ounces of this product per acre) between the last treated row and the nearest downwind field edge (in the direction the wind is blowing).

If you have questions regarding Buffer Requirement contact Bayer at 1-844-RRXTEND prior to application.



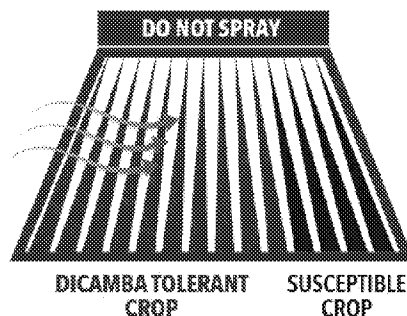
The following areas may be included in the buffer distance calculation when directly adjacent to the treated field edges:

- Roads, paved or gravel surfaces, mowed and/or managed areas adjacent to field such as rights of way.
- Planted agricultural fields containing: corn, dicamba tolerant cotton, dicamba tolerant soybean, sorghum, proso millet, small grains and sugarcane. If the applicator intends to include such crops as dicamba tolerant cotton and/or dicamba tolerant soybeans in the buffer distance calculation, the applicator must confirm the crops are in fact dicamba tolerant.
- Agricultural fields that have been prepared for planting
- Areas covered by the footprint of a building, silo, or other man made structure with walls and or roof.

#### 9.1.4.b. Sensitive Crops

**DO NOT APPLY** this product when the wind is blowing toward adjacent non-dicamba tolerant sensitive crops; this includes **NON-DICAMBA TOLERANT SOYBEAN AND COTTON**.

It is important for the applicator to be aware that wind direction may vary during the application. If wind direction shifts such that the wind is blowing toward adjacent non-dicamba tolerant sensitive crops, the applicator must cease the application.



Before making an application, consult a sensitive crop registry (such as FieldWatch); and survey adjacent fields and confirm the crops/areas surrounding the field prior to application. At a minimum, records must include the name of the sensitive crop registry and the date it was consulted and documentation of adjacent crops/areas and the date the survey was conducted.

Sensitive crops include, but are not limited to non-dicamba tolerant soybeans and cotton, tomatoes and other fruiting vegetables (EPA crop group 8), fruit trees, cucurbits (EPA crop group 9), grapes, beans, flowers, ornamentals, peas, potatoes, sunflower, tobacco, other broadleaf plants, and including plants in a greenhouse. Severe injury or destruction could occur if any contact between this product and these plants occurs.

If you have questions regarding sensitive crop registries contact Bayer at 1-844-RRXTEND prior to application.

### 9.1.5 Application Awareness

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR.

The interaction of equipment and weather related factors must be monitored to maximize performance and on-target spray deposition. The applicator is responsible for considering all of these factors when making a spray decision. The applicator is responsible for compliance with state and local pesticide regulations, including any state or local pesticide drift regulations.

### 9.2 Ground Application (Banding)

When applying XtendiMax® With VaporGrip® Technology by banding, determine the amount of herbicide and water volume needed using the following formula:

$$\frac{\text{Bandwidth in inches}}{\text{Row width in inches}} \times \text{Broadcast rate per acre} = \text{Banding herbicide rate per acre}$$
$$\frac{\text{Bandwidth in inches}}{\text{Row width in inches}} \times \text{Broadcast volume per acre} = \text{Banding water volume per acre}$$

### 9.3 Ground Application (Broadcast)

**Water Volume:** Use a **minimum of 15 gallons** of spray solution per broadcast acre for optimal performance. Use 20 gallons per acre when treating dense or tall vegetation.

**Application Equipment:** Select nozzles (refer to section 9.1.1 Nozzle type of this product label) designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to the weeds as practical for good weed coverage.

Using a hooded sprayer or other drift reduction technology in combination with approved nozzles may further reduce drift potential.

### 9.4 Ground Application (Wipers)

XtendiMax® With VaporGrip® Technology may be applied through wiper application equipment to control or suppress actively growing broadleaf weeds, brush and vines. Use a solution containing 1 part XtendiMax® With VaporGrip® Technology to 1 part water. Do not apply greater than 1 lb dicamba acid equivalent (1 quart of this product) per acre per application. Do not contact desirable vegetation with herbicide solution. Wiper application may be made to crops (including pastures) and non-cropland areas described in this label except for non-dicamba-tolerant cotton, sorghum, and non-dicamba-tolerant soybean.

### 9.5 Proper Spray System Equipment Cleanout

You must ensure that the spray system used to apply this product is clean before using this product.

Failure to properly clean the entire spray system can result in inadvertent contamination of the spray system. Small quantities of dicamba may cause injury to non-dicamba tolerant soybeans and other sensitive crops (see Section 9.1.4 of this label for more information).

Inadvertent contamination can also occur in equipment used for bulk product handling and mixing prior to use in the spray system. Care should be taken to reduce contamination not only in the spray system but in any equipment used to transfer or deliver product. For example, bulk handling and mixing equipment containing this product should be segregated when possible to reduce potential for cross-contamination. Consider using block and check valves to avoid backflow during transfer. Piping should be reviewed to ensure there not potential for product build-up. Dedicated nurse trucks and tender equipment should be used when possible.

**Clean equipment immediately after using this product**, using a triple rinse procedure as follows:

1. After spraying, drain the sprayer (including boom and lines) immediately. Do not allow the spray solution to remain in the spray boom lines overnight prior to flushing.
2. Flush tank, hoses, boom and nozzles with clean water. If equipped, open boom ends and flush.
3. Inspect and clean all strainers, screens and filters.
4. Prepare a cleaning solution with a commercial detergent or sprayer cleaner or ammonia according to the manufacturer's directions.
5. Take care to wash all parts of the tank, including the inside top surface. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.
6. Flush hoses, spray lines and nozzles for at least 1 minute with the cleaning solution.
7. Remove nozzles, screens and strainers and clean separately in the cleaning solution after completing the above procedures.
8. Drain pump, filter and lines.
9. Rinse the complete spraying system with clean water.
10. Clean and wash off the outside of the entire sprayer and boom.
11. All rinse water must be disposed of in compliance with local, state, and federal guidelines.

## 10.0 ADDITIONAL RESTRICTIONS

**Maximum Application Rates:** The maximum application or use rates stated throughout this label are given in units of volume (fluid ounces or quarts) of this product per acre. However, the maximum allowed application rates apply to this product combined with the use of any and all other herbicides containing the active ingredients dicamba, whether applied separately or as a tank mixture, on a basis of total pounds of dicamba (acid equivalents) per acre. If more than one dicamba-containing product is applied to the same site within the same year, you must ensure that the total use of dicamba (pounds acid equivalents) does not exceed 2 pounds/A per year from all applications. See the INGREDIENTS section of this label for necessary product information.

**Maximum seasonal use rate:** Refer to Table 2. Crop-Specific Restrictions for crop-specific maximum seasonal use rates. Do not exceed 88 fluid ounces of XtendiMax® With VaporGrip® Technology (2 pounds acid equivalent) per acre, per year.

**Preharvest Interval (PHI):** Refer to the CROP-SPECIFIC INFORMATION section for preharvest intervals.

**Restricted Entry Interval (REI): 24 hours**

## Crop Rotational Restrictions

No rotational cropping restrictions apply when rotating to Roundup Ready 2 Xtend® Soybeans, XtendFlex® Soybeans, or cotton seed with XtendFlex® Technology (including Bollgard® 3 XtendFlex® Cotton, Bollgard II® XtendFlex® Cotton, or XtendFlex® Cotton). For other crops the interval between application and planting rotational crop is given below. When counting days from the application of this product, do not count days when the ground is frozen. Planting at intervals less than specified below may result in crop injury. Moisture is essential for the degradation of this herbicide in soil. If dry weather prevails, use cultivation to allow herbicide contact with moist soil.

**Planting/replanting restrictions at application rates of 33 fluid ounces of this product per acre per season or less:** Follow the planting restrictions in the directions for use for Preplant application in the Crop Specific Information section of this label. For corn, cotton (except cotton seed with XtendFlex® Technology), sorghum, and soybean (except Roundup Ready 2 Xtend® Soybean and XtendFlex® Soybean), follow the planting restrictions in the directions for use for preplant application in **Section 11. Crop-Specific Information** of this label. Do not plant barley, oat, wheat, and other grass seedings for 15 days for every 11 fluid ounces of this product applied per acre east of the Mississippi River and 22 days for every 11 fluid ounces per acre applied west of the Mississippi River. No planting restrictions apply beyond 120 days after application of this product.

**Planting/replanting restrictions at application rates of more than 33 fluid ounces and up to 88 fluid ounces of this product per acre per season:** Wait a minimum of 120 days after application of this product before planting corn, sorghum and cotton (except cotton seed with XtendFlex® Technology) east of the Rocky Mountains and before planting all other crops (except Roundup Ready 2 Xtend® Soybean and XtendFlex® Soybean) grown in areas receiving 30 inches or more rainfall annually. Wait a minimum of 180 days before planting crops in areas with less than 30 inches of annual rainfall. Wait a minimum of 30 days for every 22 fluid ounces of this product applied per acre before planting barley, oat, wheat, and other grass seedings east of the Mississippi River and 45 days for every 22 fluid ounces of this product applied per acre west of the Mississippi River.

**Table 2. Crop-Specific Restrictions<sup>1</sup>**

Crop	Maximum Rate Per Acre Per Application (fl oz)	Maximum Rate Per Acre Per Season (fl oz)	Livestock Grazing or Feeding
Asparagus	22	22	Yes
Barley; Fall Spring	11 11	16.5 15	Yes
Conservation Reserve Program (CRP)	44	88	Yes
Corn	22	33	Yes <sup>2</sup>
Cotton	11	11	Yes

Cotton with XtendFlex Technology	44	88	Yes
Fallow Ground	44	88	Yes
Grass grown for seed	44	88	Yes
Oats	5.5	5.5	Yes
Pastureland	44	44	Yes
Proso Millet	5.5	5.5	Yes
Small grains grown for grass, forage, fodder, hay and/or pasture	22	22	Yes
Sorghum	11	22	Yes
Soybean	44	44	Yes
Roundup Ready 2 Xtend Soybean and XtendFlex Soybean	44	88	Yes
Sugarcane	44	88	Yes
Triticale	5.5	5.5	Yes
Sod farms and farmstead turf	44	44	Yes
Wheat	11	22	Yes
<sup>1</sup> Refer to section 11. <b>CROP-SPECIFIC INFORMATION</b> and section 12. <b>CROPS WITH XTEND TECHNOLOGY</b> for more details. <sup>2</sup> Once the crop reaches the ensilage (milk) stage or later in maturity			



## 11.0 CROP-SPECIFIC INFORMATION

Read Sections: 8.0 for Tank Mixing Instructions and 9.1.4 for Buffer Requirements and Sensitive Crops for information on tank mixing, buffer requirements, and sensitive crops.

### 11.1 Asparagus

Apply XtendiMax® With VaporGrip® Technology to emerged and actively growing weeds in 40 - 60 gallons of diluted spray per treated acre immediately after cutting the field, but at least 24 hours before the next cutting. Multiple applications may be made per growing season.

If spray contacts emerged spears, crooking (twisting) of some spears may result. If such crooking occurs, discard affected spears.

Rates: Apply 11-22 fluid ounces of XtendiMax® With VaporGrip® Technology to control annual sowthistle, black mustard, Canada and Russian thistle, and redroot pigweed (carelessweed).

Apply 22 fluid ounces of XtendiMax® With VaporGrip® Technology to control common chickweed, field bindweed, nettleleaf goosefoot, and wild radish. Up to 2 applications may be made per growing season. Do not exceed a total of 22 fluid ounces of XtendiMax® With VaporGrip® Technology per treated acre, per crop year.

Do not harvest prior to 24 hours after treatment.

[Optional: Do not use in the Coachella Valley of California]

### 11.2 Between Crop Applications

#### **Preplant Directions (Postharvest, Fallow, Crop Stubble, Set-Aside) for Broadleaf Weed Control:**

XtendiMax® With VaporGrip® Technology can be applied either postharvest in the fall, spring, or summer during the fallow period or to crop stubble/set-aside acres. Apply XtendiMax® With VaporGrip® Technology as a broadcast or spot treatment to emerged and actively growing weeds after crop harvest (postharvest) and before a killing frost or in the fallow cropland or crop stubble the following spring or summer.

See the "Crop Rotational Restrictions" in Section 10 of this label for the recommended interval between application and planting to prevent crop injury.

#### **Rates and Timings:**

Apply 5.5 – 44 fluid ounces of XtendiMax® With VaporGrip® Technology per acre. Refer to Table 1 to determine use rates for specific targeted weed species. For best performance, apply XtendiMax® With VaporGrip® Technology when annual weeds are less than 4 inches tall, when biennial weeds are in the rosette stage and to perennial weed regrowth in late summer or fall following a mowing or tillage treatment. The most effective control of upright perennial broadleaf weeds such as Canada thistle and Jerusalem artichoke occurs if XtendiMax® With VaporGrip® Technology is applied when the majority of weeds have at least 4 – 6 inches of regrowth or for weeds such as field bindweed and hedge bindweed that are in or beyond the full bloom stage.

Avoid disturbing treated areas following application. Treatments may not kill weeds that develop from seed or underground plant parts such as rhizomes or bulblets, after the effective period for XtendiMax® With VaporGrip® Technology. For seedling control, a follow-up program or other cultural practices could be instituted. For small grain in-crop uses of XtendiMax® With VaporGrip® Technology, refer to the small grain section for details.

### 11.3 Conservation Reserve Program (CRP)

XtendiMax® With VaporGrip® Technology is recommended for use on both newly seeded and established grasses grown in Conservation Reserve or federal Set-Aside Programs. Treatments of XtendiMax® With VaporGrip® Technology will injure or may kill alfalfa, clovers, lespedeza, wild winter peas, vetch, and other legumes.

#### Newly Seeded Areas

XtendiMax® With VaporGrip® Technology may be applied either preplant or postemergence to newly seeded grasses or small grains such as barley, oats, rye, sudangrass, wheat, or other grain species grown as a cover crop. Postemergence applications may be made after seedling grasses exceed the 3-leaf stage. Rates of XtendiMax® With VaporGrip® Technology greater than 22 fluid ounces per treated acre may severely injure newly seeded grasses.

Preplant applications may injure new seedlings if the interval between application and grass planting is less than 45 days per 22 fluid ounces of XtendiMax® With VaporGrip® Technology applied per treated acre west of the Mississippi River or 20 days per 22 fluid ounces applied east of the Mississippi River.

#### Established Grass Stands

Established grass stands are perennial grasses planted one or more seasons prior to treatment. Certain species (bentgrass, carpetgrass, smooth brome, buffalograss, or St. Augustinegrass) may be injured when treated with more than 22 fluid ounces of XtendiMax® With VaporGrip® Technology per treated acre.

When applied at recommended rates, XtendiMax® With VaporGrip® Technology will control many annual and biennial weeds and provide control or suppression of many perennial weeds.

#### Rates and Timings

Apply 5.5 - 44 fluid ounces of XtendiMax® With VaporGrip® Technology per acre. Refer to **Table 1** for rates based on target weed species. Retreatments may be made as needed; however, do not exceed a total of 88 fluid ounces (4 pints) of XtendiMax® With VaporGrip® Technology per acre per year.

### 11.4 Corn (Field, Pop, Seed, And Silage)

Direct contact of XtendiMax® With VaporGrip® Technology with corn seed must be avoided. If corn seeds are less than 1.5 inches below the surface, delay application until corn has emerged.

Applications of XtendiMax® With VaporGrip® Technology to corn during periods of rapid growth may result in temporary leaning. Corn will usually become erect within 3 to 7 days. Cultivation should be delayed until after corn is growing normally to avoid breakage.

Corn may be harvested or grazed for feed once the crop has reached the ensilage (milk) stage or later in maturity.

Up to 2 applications of XtendiMax® With VaporGrip® Technology may be made during a growing season. Sequential applications must be separated by 2 weeks or more.

Do not apply XtendiMax® With VaporGrip® Technology to seed corn or popcorn without first verifying with your local seed corn company (supplier) the selectivity of XtendiMax® With VaporGrip® Technology on your inbred line or variety of popcorn. This precaution will help avoid potential injury of sensitive varieties.

Avoid using crop oil concentrates after crop emergence as crop injury may result. Use crop oil concentrates only in dry conditions when corn is less than 5 inches tall when applying XtendiMax® With VaporGrip® Technology.

Use of sprayable fluid fertilizer as the carrier is not recommended for applications of XtendiMax® With VaporGrip® Technology made after corn emergence.

XtendiMax® With VaporGrip® Technology is not registered for use on sweet corn.

#### **Preplant and Preemergence Application in No-Tillage Corn:**

**Rates:** Apply 22 fluid ounces of XtendiMax® With VaporGrip® Technology per acre on medium- or fine-textured soils containing 2.5% or greater organic matter. Use 11 fluid ounces per acre on coarse soils (sand, loamy sand, and sandy loam) or medium- and fine-textured soils with less than 2.5% organic matter.

**Timing:** XtendiMax® With VaporGrip® Technology can be applied to emerging weeds before, during, or after planting a corn crop. When planting into a legume sod (e.g., alfalfa or clover), apply XtendiMax® With VaporGrip® Technology after 4 – 6 inches of regrowth has occurred

#### **Preemergence Application in Conventional or Reduced Tillage Corn:**

**Rates:** Apply 22 fluid ounces of XtendiMax® With VaporGrip® Technology per treated acre on medium- or fine-textured soils containing 2.5% organic matter or more. Do not apply to coarse textured soils (sand, loamy sand, or sandy loam) of any soil with less than 2.5% organic matter until after corn emergence (See Early Postemergence uses below).

**Timing:** XtendiMax® With VaporGrip® Technology may be applied after planting and prior to corn emergence. Pre-emergence application of XtendiMax® With VaporGrip® Technology does not require mechanical incorporation to become active. A shallow mechanical incorporation is recommended if application is not followed by adequate rainfall or sprinkler irrigation. Avoid tillage equipment (e.g., drags, harrows) which concentrates treated soil over seed furrow as seed damage could result.

Preemergence control of cocklebur, jimsonweed, and velvetleaf may be reduced if conditions such as low temperature or lack of soil moisture cause delayed or deep germination of weeds.

#### **Early Postemergence Application in All Tillage Systems:**

**Rates:** Apply 22 fluid ounces of XtendiMax® With VaporGrip® Technology per treated acre. Reduce the rate to 11 fluid ounces per treated acre if corn is growing on coarse textured soils (sand, loamy sand, and sandy loam).

**Timing:** Apply between corn emergence and the 5-leaf stage or 8 inches tall, whichever occurs first. Refer to Late Postemergence Applications if the sixth true leaf is emerging from whorl or corn is greater than 8 inches tall.

#### **Late Postemergence Application:**

**Rate:** Apply 11 fluid ounces of XtendiMax® With VaporGrip® Technology per treated acre.

**Timing:** Apply XtendiMax® With VaporGrip® Technology from 8 - 36 inch tall corn or 15 days before tassel emergence, whichever comes first. For best performance, apply when weeds are less than 3 inches tall.

Apply directed spray when corn leaves prevent proper spray.

### **11.5 Cotton**

For directions for use with crops with Xtend Technology see the "CROPS WITH XTEND TECHNOLOGY" section of this label.

### **Preplant Application:**

Apply up to 11 fluid ounces of XtendiMax® With VaporGrip® Technology per acre to control emerged broadleaf weeds prior to planting cotton in conventional or conservation tillage systems.

For best performance, apply XtendiMax® With VaporGrip® Technology when weeds are in the 2 - 4 leaf stage and rosettes are less than 2 inches across.

Following application of XtendiMax® With VaporGrip® Technology and a minimum accumulation of 1 inch of rainfall or overhead irrigation, allow a minimum of 21 days between treatment and planting per application of 11 fluid ounces per acre or less. This plant back interval must be observed prior to planting cotton.

Do not apply preplant to cotton west of the Rockies.

Do not make XtendiMax® With VaporGrip® Technology preplant applications to cotton in geographic areas with average annual rainfall less than 25 inches.

If applying a spring preplant treatment following application of a fall preplant (postharvest) treatment, then the combination of both treatments may not exceed 2 pounds acid equivalent per acre.

### **11.6 Grass Grown For Seed**

Apply 11 - 22 fluid ounces of XtendiMax® With VaporGrip® Technology per treated acre on seedling grass after the crop reaches the 3 -5 leaf stage. Apply up to 44 fluid ounces of XtendiMax® With VaporGrip® Technology on well-established perennial grass. For best performance, apply XtendiMax® With VaporGrip® Technology when weeds are in the 2 - 4 leaf stage and rosettes are less than 2 inches across. Use the higher level of listed rate ranges when treating more mature weeds or dense vegetative growth.

To suppress annual grasses such as brome (downy and rigput), rattail fescue, and windgrass, apply up to 44 fluid ounces of XtendiMax® With VaporGrip® Technology per treated acre in the fall or late summer after harvest and burning of established grass seed crops. Applications should be made immediately following the first irrigation when the soil is moist and before weeds have more than 2 leaves.

Do not apply XtendiMax® With VaporGrip® Technology after the grass seed crop begins to joint.

Refer to the Pasture, Hay, Rangeland, and General Farmstead section for grazing and feeding restrictions.

### **11.7 Proso Millet**

**For use only within Colorado, Nebraska, North Dakota, South Dakota, [Optional: and Wyoming].**

XtendiMax® With VaporGrip® Technology combined with an appropriate tank-mix partner will provide control or suppression of the annual broadleaf weeds listed in **Section 13**.

### **11.8 Pasture, Hay, Rangeland, And General Farmstead (Noncropland)**

XtendiMax® With VaporGrip® Technology is recommended for use on pasture, hay, rangeland, and general farmstead (non-cropland) (including fencerows and non-irrigation ditch banks) for control or suppression of broadleaf weed and brush species listed in Section 12.

XtendiMax® With VaporGrip® Technology may also be applied to non-cropland areas to control broadleaf weeds in noxious weed control programs, districts, or areas including broadcast or spot treatment of roadsides and highways, utilities, railroad, and pipeline rights-of-way. Noxious weeds must be recognized at the state level, but programs may be administered at state, county, or other level.

XtendiMax® With VaporGrip® Technology uses described in this section also pertain to grasses and small grains (forage sorghum, rye, sudangrass, or wheat) grown for grass, forage, fodder, hay and/or pasture use only. Grasses and small grains not grown for grass, forage, fodder, hay and/or pasture must comply with crop-specific uses in this label. Some perennial weeds may be controlled with lower rates of XtendiMax® With VaporGrip® Technology (refer to **Table 1**).

## Rates and Timings

Refer to **Table 1** for rate selection based on targeted weed or brush species.

Rates above 44 fluid ounces of XtendiMax® With VaporGrip® Technology per acre are for spot treatments only. Spot treatment is defined as no more than a total of 1000 square feet of treated area per acre. Do not broadcast apply more than 44 fluid ounces per acre.

Retreatments may be made as needed; however, do not exceed a total of 44 fluid ounces of XtendiMax® With VaporGrip® Technology per treated acre during a growing season.

Grass grown for hay requires a minimum of 7-days between treatment and harvest.

## Crop-Specific Restrictions

Do not apply more than 22 fluid ounces of XtendiMax® With VaporGrip® Technology per acre to small grains grown for pasture.

Newly seeded areas may be severely injured if more than 22 fluid ounces of XtendiMax® With VaporGrip® Technology is applied per acre.

Established grass crops growing under stress can exhibit various injury symptoms that may be more pronounced if herbicides are applied. Bentgrass, carpetgrass, buffalograss, and St. Augustin grass may be injured if more than 22 fluid ounces of XtendiMax® With VaporGrip® Technology is applied per acre. Usually colonial bent grasses are more tolerant than creeping types. Velvet grasses are most easily injured. Treatments will kill or injure alfalfa, clovers, lespedeza, wild winter peas, vetch, and other legumes.

**Table 3** lists the timing restrictions for grazing or harvesting hay from treated fields. There are no grazing restrictions for animals other than lactating dairy animals.

**Table 3. Timing Restrictions for Lactating Dairy Animals Following Treatment**

XtendiMax® With VaporGrip® Technology Rate per Treated Acre (fluid ounces)	Days Before Grazing (days)	Days Before Hay Harvest (days)
Up to 22	7	37
Up to 44	21	51

- **Spot Treatments:** XtendiMax® With VaporGrip® Technology may be applied to individual clumps or small areas of undesirable vegetation using handgun or similar types of application equipment. Apply diluted sprays to allow complete wetting (up to runoff) of foliage and stems.

### Cut Surface Treatments:

XtendiMax® With VaporGrip® Technology may be applied as a cut surface treatment for control of unwanted trees and prevention of sprouts of cut trees.

**Rate:** Mix 1 part XtendiMax® With VaporGrip® Technology with 1 - 3 parts water to create the application solution. Use the lower dilution rate when treating difficult-to-control species.

- **For Frill or Girdle Treatments:** Make a continuous cut or a series of overlapping cuts using an axe to girdle tree trunk. Spray or paint the cut surface with the solution.
- **For Stump Treatments:** Spray or paint freshly cut surface with the water mix. The area adjacent to the bark should be thoroughly wet.

#### **Applications For Control of Dormant Multiflora Rose:**

XtendiMax® With VaporGrip® Technology can be applied when plants are dormant as an undiluted spot treatment directly to the soil or as a Lo-Oil basal bark treatment using an oil-water emulsion solution.

- **Spot treatments:** Spot treatment applications of XtendiMax® With VaporGrip® Technology should be applied directly to the soil as close as possible to the root crown but within 6 - 8 inches of the crown. On sloping terrain, apply XtendiMax® With VaporGrip® Technology to the uphill side of the crown. Do not apply when snow or water prevents applying XtendiMax® With VaporGrip® Technology directly to the soil. The use rate of XtendiMax® With VaporGrip® Technology depends on the canopy diameter of the multiflora rose.

**Examples:** Use 0.34, 1.38, or 3.23 fluid ounces of XtendiMax® With VaporGrip® Technology respectively, for 5, 10, or 15 feet canopy diameters.

- **Lo-Oil basal bark treatments:** For Lo-Oil basal bark treatments, apply XtendiMax® With VaporGrip® Technology to the basal stem region from the ground line to a height of 12 - 18 inches. Spray until runoff, with special emphasis on covering the root crown. For best results, apply XtendiMax® With VaporGrip® Technology when plants are dormant. Do not apply after bud break or when plants are showing signs of active growth. Do not apply when snow or water prevents applying XtendiMax® With VaporGrip® Technology to the ground line.

To prepare approximately 2 gallons of a Lo-Oil spray solution:

- 1) Combine 1.5 gallons of water, 1 ounce of emulsifier, 22 fluid ounces of XtendiMax® With VaporGrip® Technology, and 2.5 pints of No. 2 diesel fuel.
- 2) Adjust the amounts of materials used proportionately to the amount of final spray solution desired.

Do not exceed 8 gallons of spray solution mix applied per acre, per year.

### **11.9 SMALL GRAINS**

#### **11.9.1 Small Grains Not Underseeded To Legumes (fall- and spring-seeded barley, oat, triticale and wheat)**

Refer to the specific crop sections below for use rates. When treating difficult to control weeds such as kochia, wild buckwheat, cow cockle, prostrate knotweed, Russian thistle, and prickly lettuce or when dense vegetative growth occurs, use the 4.12 – 5.5 fluid ounces of XtendiMax® With VaporGrip® Technology per acre.

**Timings:** Apply XtendiMax® With VaporGrip® Technology before, during, or after planting small grains. See specific small grain crop uses below for maximum crop stage. For best performance, apply XtendiMax® With VaporGrip® Technology when weeds are in the 2 - 3 leaf stage and rosettes are less than 2 inches across. Applying XtendiMax® With VaporGrip® Technology to small grains during periods of rapid growth may result in crop leaning. This condition is temporary and will not reduce crop yields.

Restrictions for small grain areas that are grazed or cut for hay are indicated in **Table 3** in Pasture, Hay, Rangeland, and General Farmstead section of this label.

#### **11.9.2 Small Grains: Barley (fall- and spring-seeded)**

##### **Early season applications:**

Apply 2.75 – 5.5 fluid ounces of XtendiMax® With VaporGrip® Technology to fall-seeded barley prior to the jointing stage. Apply 2.75 – 4.12 fluid ounces of XtendiMax® With VaporGrip® Technology before spring-seeded barley exceeds the 4-leaf stage.

**Note:** For spring barley varieties that are seeded during the winter months or later, follow the rates and timings given for spring-seeded barley.

#### **Preharvest applications:**

XtendiMax® With VaporGrip® Technology can be used to control weeds that may interfere with harvest of fall and spring-seeded barley. Apply 11 fluid ounces of XtendiMax® With VaporGrip® Technology per acre as a broadcast or spot treatment to annual broadleaf weeds when barley is in the hard dough stage and the green color is gone from the nodes (joints) of the stem. Best results will be obtained if application can be made when weeds are actively growing, but before weeds canopy.

Allow a minimum of 7 days between treatment and harvest. Do not use preharvest-treated barley for seed unless a germination test is performed on the seed with an acceptable result of 95% germination or better.

[Optional: Do not make preharvest applications in California.]

#### **11.9.3 Small Grains: Oats (fall- and spring-seeded)**

##### **Early season applications:**

Apply 2.75 – 5.5 fluid ounces of XtendiMax® With VaporGrip® Technology per acre to fall-seeded oat prior to the jointing stage. Apply 2.75 – 5.5 fluid ounces of XtendiMax® With VaporGrip® Technology before spring-seeded oat exceed the 5-leaf stage.

Do not tank mix XtendiMax® With VaporGrip® Technology with 2,4-D in oat.

Allow a minimum of 7 days between treatment and harvest.

#### **11.9.4 Small Grains: Triticale (fall- and spring-seeded)**

##### **Early season applications:**

Apply 2.75 – 5.5 fluid ounces of XtendiMax® With VaporGrip® Technology to triticale.

Early season applications to fall-seeded triticale must be made prior to the jointing stage.

Early season applications to spring-seeded triticale must be made before triticale reaches the 6-leaf stage.

#### **11.9.5 Small Grains: Wheat (fall- and spring-seeded)**

##### **Early Season Applications:**

Apply 2.75 – 5.5 fluid ounces of XtendiMax® With VaporGrip® Technology to wheat unless using one of the fall-seeded wheat specific programs below.

Early season applications to fall-seeded wheat must be made prior to the jointing stage.

Early season applications to spring-seeded wheat must be made before wheat exceeds the 6-leaf stage.

Early developing wheat varieties such as TAM 107, Madison, or Wakefield must receive application between early tillering and the jointing stage. Care should be taken in staging these varieties to be certain that the application occurs prior to the jointing stage.

**Specific use programs for fall-seeded wheat only:**

[Optional: XtendiMax® With VaporGrip® Technology may be used at 8.25 fluid ounces on fall-seeded wheat in Western Oregon as a spring application only.] In Colorado, Kansas, New Mexico, Oklahoma, and Texas, up to 11 fluid ounces of XtendiMax® With VaporGrip® Technology may be applied on fall-seeded wheat after it exceeds the 3-leaf stage for suppression of perennial weeds, such as field bindweed. Applications may be made in the fall following a frost but before a killing freeze.

**Preharvest applications:**

XtendiMax® With VaporGrip® Technology can be used to control weeds that may interfere with harvest of wheat. Apply 11 fluid ounces XtendiMax® With VaporGrip® Technology per acre as a broadcast or spot treatment to annual broadleaf weeds when wheat is in the hard dough stage and the green color is gone from the nodes (joints) of the stem. Best results will be obtained if application can be made when weeds are actively growing but before weeds canopy.

Allow a minimum of 7 days between treatment and harvest. Do not use preharvest-treated wheat for seed unless a germination test is performed on the seed with an acceptable result of 95% germination or better.

[Optional: Do not make preharvest applications in California.]

**11.10 Sorghum**

XtendiMax® With VaporGrip® Technology may be applied preplant, postemergence, or preharvest in sorghum to control many annual broadleaf weeds and to reduce competition from established perennial broadleaf weeds, as well as control their seedlings.

Do not graze or feed treated sorghum forage or silage prior to mature grain stage. If sorghum is grown for pasture or hay, refer to Pasture, Hay, Rangeland, and General Farmstead section of this label for specific grazing and feeding restrictions.

Do not apply XtendiMax® With VaporGrip® Technology to sorghum grown for seed production.

**Preplant Application:**

Up to 11 fluid ounces of XtendiMax® With VaporGrip® Technology may be applied per acre if applied at least 15 days before sorghum planting.

**Postemergence Application:**

Up to 11 fluid ounces of XtendiMax® With VaporGrip® Technology per acre may be applied after sorghum is in the spike stage (all sorghum emerged) but before sorghum is 15 inches tall. For best performance, apply XtendiMax® With VaporGrip® Technology when the sorghum crop is in the 3 - 5 leaf stage and weeds are small (less than 3 inches tall). Use drop pipes (drop nozzles) if sorghum is taller than 8 inches. Keep the spray off the sorghum leaves and out of the whorl to reduce the likelihood of crop injury and to improve spray coverage of weed foliage. Applying XtendiMax® With VaporGrip® Technology to sorghum during periods of rapid growth may result in temporary leaning of plants or rolling of leaves. These effects are usually outgrown within 10 - 14 days. Delay harvest until 30 days after a preharvest treatment.

**Preharvest uses in Texas and Oklahoma only:** Up to 11 fluid ounces of XtendiMax® With VaporGrip® Technology per acre may be applied for weed suppression any time after the sorghum has reached the soft dough stage. An agriculturally approved surfactant may be used to improve performance (read Section 8.0 for tank mixing instructions). Delay harvest until 30 days after a preharvest treatment.

**Split Application:**



XtendiMax® With VaporGrip® Technology may be applied in split applications: preplant followed by postemergence or preharvest; or postemergence followed by preharvest. Do not exceed 11 fluid ounces per acre, per application or a total of 22 ounces per acre, per season.

### 11.11 Soybean

For directions for use with crops with Xtend Technology see the "CROPS WITH XTEND TECHNOLOGY" section of this label.

#### **Preplant Applications:**

Apply 5.5 -22 fluid ounces of XtendiMax® With VaporGrip® Technology per acre to control emerged broadleaf weeds prior to planting soybeans. Do not exceed 22 fluid ounces of XtendiMax® With VaporGrip® Technology per acre in a spring application prior to planting soybeans.

Following application of XtendiMax® With VaporGrip® Technology and a minimum accumulation of 1 inch rainfall or overhead irrigation, allow a minimum of 14 days between treatment and planting for applications of 11 fluid ounces per acre or less, and allow a minimum of 28 days between treatment and planting for applications of 22 fluid ounces per acre. These plant back intervals must be observed prior to planting soybeans or crop injury may occur.

Do not make XtendiMax® With VaporGrip® Technology preplant applications to soybeans in geographic areas with average annual rainfall less than 25 inches.

#### **Preharvest Applications:**

XtendiMax® With VaporGrip® Technology can be used to control many annual and perennial broadleaf weeds and control or suppress many biennial and perennial broadleaf weeds in soybean prior to harvest (refer to **Section 10**). Apply 11 - 44 fluid ounces of XtendiMax® With VaporGrip® Technology per acre as a broadcast or spot treatment to emerged and actively growing weeds after soybean pods have reached mature brown color and at least 75% leaf drop has occurred.

Do not harvest soybeans until 7 days after application.

Treatments may not kill weeds that develop from seed or underground plant parts, such as rhizomes or bulblets, after the effective period for XtendiMax® With VaporGrip® Technology. For seedling control, a follow-up program or other cultural practice could be instituted.

Do not use preharvest-treated soybean for seed unless a germination test is performed on the seed with an acceptable result of 95% germination or better.

Do not feed soybean fodder or hay following a preharvest application of XtendiMax® With VaporGrip® Technology.

[Optional: Do not make preharvest applications in California.]

### 11.12 Sugarcane

Apply XtendiMax® With VaporGrip® Technology for control of annual, biennial, or perennial broadleaf weeds listed in Section 11. Apply 11 - 33 fluid ounces of XtendiMax® With VaporGrip® Technology per acre for control of annual weeds, 22 - 44 fluid ounces for control of biennial weeds, and 44 fluid ounces for control or suppression of perennial weeds.

Use the higher level of listed rate ranges when treating dense vegetative growth.

A single retreatment may be made as needed, however, do not exceed a total of 88 fluid ounces of XtendiMax® With VaporGrip® Technology per treated acre during a growing season.

Timing: XtendiMax® With VaporGrip® Technology may be applied to sugarcane any time after weeds have emerged, but before the close-in stage of sugarcane. Applications of 44 fluid ounces of XtendiMax®

With VaporGrip® Technology per acre made over the top of actively growing sugarcane may result in crop injury.

When possible, direct the spray beneath the sugarcane canopy to minimize the likelihood of crop injury. Using directed sprays will also help maximize the spray coverage of weed foliage.

Allow a minimum of 87 days between treatment and harvest.

### **11.13 Farmstead Turf (noncropland) and Sod Farms**

Do not use on residential sites.

For use in general farmstead (noncropland) and sod farms, apply 4.12 – 44 fluid ounces of XtendiMax® With VaporGrip® Technology per acre to control or suppress growth of many annual, biennial, and some perennial broadleaf weeds commonly found in turf. XtendiMax® With VaporGrip® Technology will also suppress many other listed perennial broadleaf weeds and woody brush and vine species. Refer to Table 1 for rate recommendations based on targeted weed or brush species and growth stage.

Repeat treatments may be made as needed; however, do not exceed 44 fluid ounces of XtendiMax® With VaporGrip® Technology per acre, per growing season.

Apply 30 - 200 gallons of diluted spray per treated acre (3 - 17 quarts of water per 1,000 square feet), depending on density or height of weeds treated and on the type of equipment used.

To avoid injury to newly seeded grasses, delay application of XtendiMax® With VaporGrip® Technology until after the second mowing. Furthermore, applying more than 16 fluid ounces of XtendiMax® With VaporGrip® Technology per treated acre may cause noticeable stunting or discoloration of sensitive grass species such as bentgrass, carpetgrass, buffalograss, and St. Augustinegrass.

In areas where roots of sensitive plants extend, do not apply more than 5.5 fluid ounces of XtendiMax® With VaporGrip® Technology per treated acre on coarse-textured (sandy-type) soils, or in excess of 8 fluid ounces per treated acre on fine-textured soils. Do not make repeat applications in these areas for 30 days and until previous applications of XtendiMax® With VaporGrip® Technology have been activated in the soil by rain or irrigation.

## **12.0 CROPS WITH XTEND® TECHNOLOGY**

COTTON WITH XTENDFLEX® TECHNOLOGY (INCLUDING BOLLGARD II® XTENDFLEX® COTTON, BOLLGARD® 3 XTENDFLEX® COTTON, OR XTENDFLEX® COTTON), ROUNDUP READY 2 XTEND® SOYBEAN, AND XTENDFLEX® SOYBEAN CONTAIN A PATENTED GENE THAT PROVIDES TOLERANCE TO DICAMBA, THE ACTIVE INGREDIENT IN THIS PRODUCT. THIS PRODUCT WILL CAUSE SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS IF APPLIED TO COTTON AND SOYBEAN THAT ARE NOT DICAMBA TOLERANT, INCLUDING COTTON AND SOYBEAN WITH A TRAIT ENGINEERED TO CONFER TOLERANCE TO AUXIN HERBICIDES OTHER THAN DICAMBA. FOLLOW THE REQUIREMENTS SET FORTH HEREIN TO PREVENT SEVERE CROP INJURY OR DESTRUCTION AND YIELD LOSS. CONTACT WITH FOLIAGE, GREEN STEMS, OR FRUIT OF CROPS, OR ANY DESIRABLE PLANTS THAT DO NOT CONTAIN A DICAMBA TOLERANCE GENE OR ARE NOT NATURALLY TOLERANT TO DICAMBA, COULD RESULT IN SEVERE PLANT INJURY OR DESTRUCTION.

Information on cotton with XtendFlex® Technology, Roundup Ready 2 Xtend® Soybean, and XtendFlex® Soybean can be obtained from your seed supplier or Monsanto representative. Cotton with XtendFlex® Technology, Roundup Ready 2 Xtend® Soybean, and XtendFlex® Soybean must be purchased from an authorized licensed seed supplier.

Note: Cotton with XtendFlex® Technology, Roundup Ready 2 Xtend® Soybean, and XtendFlex® Soybean and methods of controlling weeds and applying dicamba in a Cotton with XtendFlex® Technology, Roundup Ready 2 Xtend® Soybean, and XtendFlex® Soybean crop are protected under U.S. patent law. No license to use Cotton with XtendFlex® Technology, Roundup Ready 2 Xtend® Soybean, and XtendFlex® Soybean is granted or implied with the purchase of this herbicide product. Cotton with XtendFlex® Technology, Roundup Ready 2 Xtend® Soybean, and XtendFlex® Soybean are owned by Monsanto and a license must be obtained from Monsanto before using it. Contact your Authorized Monsanto Retailer for information on obtaining a license to Cotton with XtendFlex® Technology, Roundup Ready 2 Xtend® Soybean, and XtendFlex® Soybean.

## 12.1 Cotton with XtendFlex® Technology

DO NOT combine these instructions with other instructions in the "COTTON" Section of **this** label for use over crops that do not contain the dicamba tolerance trait.

**TYPES OF APPLICATIONS:** Burndown/Early Preplant; Preplant; At-Planting; Preemergence; Postemergence (In-crop)

### USE INSTRUCTIONS

Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. For best performance, control weeds early when they are less than 4 inches. Timely application will improve control and reduce weed competition. Refer to the following table for maximum application rates of this product with cotton with XtendFlex® Technology.

Maximum Application Rates	
Combined total per year for all applications	88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)
Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications	44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre)
Total of all in-crop applications up to mid-bloom stage or no more than 60 days after planting, whichever occurs first	44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre)
Maximum In-crop, single application	22 fluid ounces per acre (0.5 lb. a.e. dicamba per acre)

a.e. – acid equivalent

Refer to Table 1 for application rates for weed type and growth stage controlled by this product. Maximum in-crop application rate should be used when treating tough to control weeds, dense vegetative growth or weeds with a well-established root system.

### Burndown/Early Preplant, Preplant, At-Planting, Preemergence

**USE INSTRUCTIONS:** This product may be used to control broadleaf weeds and may be applied before, during or immediately after planting cotton with XtendFlex® Technology. Refer to the "WEEDS CONTROLLED" section of this label for XtendiMax® With VaporGrip® Technology for specific weeds controlled.

### RESTRICTIONS:

- The maximum combined quantity of this product that may be applied for all burndown/early preplant, preplant, at-planting, and preemergence applications is 44 fluid ounces (1.0 lb a.e. dicamba) per acre per season.

- The maximum application rate for a single, burndown/early preplant, preplant, at-planting, or preemergence application must not exceed 44 fluid ounces (1.0 lb a.e. dicamba) per acre.
- Do not apply less than 22 fluid ounces (0.5 lb a.e. dicamba) per acre.

#### **Postemergence (In-crop)**

**USE INSTRUCTIONS:** This product may be used to control broadleaf weeds in cotton with XtendFlex® Technology. In-crop applications of this product can be made up to mid-bloom stage or no more than 60 days after planting, whichever occurs first.

The maximum and minimum rate for any single, in-crop application is 22 fluid ounces (0.5 lb a.e. dicamba) per acre. Using the appropriate application rate may reduce the selection for resistant weeds. For best performance, control weeds early when they are less than 4 inches. To the extent permitted by applicable law, Monsanto Company does not warrant product performance of applications to labeled weeds greater than 4 inches in height. Sequential applications of this product may be necessary to control new flushes of weeds or on tough-to-control weeds. Allow at least 7 days between applications.

Postemergence applications of this product mixed with adjuvants may cause a leaf response to cotton with XtendFlex® Technology. The symptoms usually appear as necrotic spots on fully expanded leaves. EC-based products that are tank mixed with products containing dicamba may increase the severity of the leaf damage.

#### **RESTRICTIONS:**

- The combined total applied in-crop up to mid-bloom stage or no more than 60 days after planting, whichever occurs first, must not exceed 44 fluid ounces (1.0 lb a.e. dicamba) per acre and a maximum of two in-crop applications.
- The maximum single, in-crop application rate must not exceed 22 fluid ounces (0.5 lb a.e. dicamba).
- The combined total per year for all applications must not exceed 88 fluid ounces (2.0 lb a.e. dicamba) per acre. For example, if a preplant application of 44 fluid ounces (1.0 lb a.e. dicamba) per acre was made, then the combined total in-crop applications must not exceed 44 fluid ounces (1.0 lb a.e. dicamba) per acre.

### **12.2 Roundup Ready 2 Xtend® Soybean and XtendFlex® Soybean**

DO NOT combine these instructions with other instructions in the "SOYBEAN" Section of **this** label for use over crops that do not contain the dicamba tolerance trait.

**TYPES OF APPLICATIONS:** Burndown/Early Preplant; Preplant; At-Planting; Preemergence; Postemergence (In-crop); Lay-By

#### **USE INSTRUCTIONS**

Apply this product in a minimum of 15 gallons of spray solution per acre as a broadcast application. For best performance, control weeds early when they are less than 4 inches. Timely application will improve control and reduce weed competition. Refer to the following table for maximum application rates of this product with Roundup Ready 2 Xtend® Soybean and XtendFlex® Soybean.

<b>Maximum Application Rates</b>	
Combined total per year for all applications	88 fluid ounces per acre (2.0 lb. a.e. dicamba per acre)
Total of all Burndown/Early Preplant, Preplant, At-Planting, and Preemergence applications	44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre)

Total of all In-crop applications from emergence prior to beginning bloom (R1 stage soybeans) or no more than 45 days after planting, whichever occurs first	44 fluid ounces per acre (1.0 lb. a.e. dicamba per acre)
Maximum In-crop, single application	22 fluid ounces per acre (0.5 lb. a.e. dicamba per acre)

a.e. – acid equivalent

Refer to Table 1 for application rates for weed type and growth stage controlled by this product. Maximum in-crop application rate should be used when treating tough to control weeds, dense vegetative growth or weeds with a well-established root system.

#### **Burndown/Early Preplant, Preplant, At-Planting, Preemergence**

USE INSTRUCTIONS: This product may be used to control broadleaf weeds and may be applied before, during or immediately after planting Roundup Ready 2 Xtend® Soybean and XtendFlex® Soybean. Refer to the “WEEDS CONTROLLED” section of this label for specific weeds controlled.

#### **RESTRICTIONS:**

- The maximum combined quantity of this product that may be applied for all burndown/early preplant, preplant, at-planting, and preemergence applications is 44 fluid ounces (1.0 lb a.e. dicamba) per acre per season.
- The maximum application rate for a single, burndown/early preplant, preplant, at-planting, or preemergence application must not exceed 44 fluid ounces (1.0 lb a.e. dicamba) per acre.
- Do not apply less than 22 fluid ounces (0.5 lb a.e. dicamba) per acre.

#### **Postemergence (In-crop)**

USE INSTRUCTIONS: This product may be used to control broadleaf weeds in Roundup Ready 2 Xtend® Soybean and XtendFlex® Soybean. In-crop applications of this product can be made prior to beginning bloom (R1 stage soybeans) or no more than 45 days after planting, whichever occurs first.

The maximum and minimum rate for any single, in-crop application is 22 fluid ounces (0.5 lb a.e. dicamba) per acre. Using the appropriate application rate may reduce the selection for resistant weeds. For best performance, control weeds early when they are less than 4 inches. To the extent permitted by applicable law, Monsanto Company does not warrant product performance of applications to labeled weeds greater than 4 inches in height.

A second application of this product may be necessary to control new flushes of weeds and can be made prior to beginning bloom (R1 stage soybeans) or no more than 45 days after planting, whichever occurs first. Allow at least 7 days between applications. For best results, apply XtendiMax® With VaporGrip® Technology after some weed re-growth has occurred.

Application of this product postemergence and under stressful environments may cause temporary loss of turgor, a response commonly described as leaf droop in Roundup Ready 2 Xtend® Soybean and XtendFlex® Soybean. Typically, affected plants recover in 1-3 days depending on the level of droop and environmental conditions.

#### **RESTRICTIONS:**

- The combined total application rate in-crop prior to beginning bloom (R1 stage soybeans) or no more than 45 days after planting, whichever occurs first, must not exceed 44 fluid ounces (1.0 lb. a.e. dicamba) per acre a maximum of two in-crop applications.
- Do not make in-crop applications of this product during and after beginning bloom (R1 stage soybeans) or more than 45 days after planting.
- The maximum single, in-crop application rate must not exceed 22 fluid ounces (0.5 lb. a.e. dicamba) per acre. The combined total per year for all applications must not exceed 88 fluid ounces (2.0 lb. a.e. dicamba) per acre.

### 13.0 WEEDS CONTROLLED

#### General Weed List, Including ALS-, Glyphosate, and Triazine-Resistant Biotypes

##### Annuals

Alkanet	Goosefoot, Nettleleaf	Radish, Wild
Amaranth, Palmer, Powell, Spiny	Hempnettle	Ragweed, Common, Giant (Buffaloweed), Lance- Leaf
Aster, Slender	Henbit	Rocket, London, Yellow
Bedstraw, Catchweed	Jacobs-Ladder	Rubberweed, Bitter (Bitterweed)
Beggarweed, Florida	Jimsonweed	Salsify
Broomweed, Common	Knawel (German Moss)	Senna, Coffee
Buckwheat, Tartary, Wild	Knotweed, Prostrate	Sesbania, Hemp
Buffalobur	Kochia	Shepherdspurse
Burclover, California	Ladysthumb	Sicklepod
Burcucumber	Lambsquarters Common	Sida, Prickly (Teaweed)
Buttercup, Corn, Creeping, Roughseed, Western Field	Lettuce, Miners, Prickly	Smartweed, Green, Pennsylvania
Carpetweed	Mallow, Common, Venice	Sneezeweed, Bitter
Catchfly, Nightflowering	Marestail (Horseweed)	Sowthistle, Annual, Spiny
Chamomile, Corn	Mayweed	Spanish Needles
Chevil, Bur	Morningglory, Ivyleaf, Tall	Spikeweed, Common
Chickweed, Common	Mustard, Black, Blue, Tansy, Treacle, Tumble, Wild, Yellowtops	Spurge, Prostrate, Leafy
Clovers	Nightshade, Black, Cutleaf	Spurry, Corn
Cockle, Corn, Cow, White	Pennycress, Field (Fanweed, Frenchweed, Stinkweed)	Starbur, Bristly
Cocklebur, Common	Pepperweed, Virginia (Peppergrass)	Starwort, Little
Copperleaf, Hophornbeam	Pigweed, Prostrate, Redroot (Carelessweed), Rough, Smooth, Tumble	Sumpweed, Rough
Cornflower (Bachelor Button)	Pineappleweed	Sunflower, Common (Wild), Volunteer
Croton, Tropic, Woolly	Poorjoe	Thistle, Russian
Daisy, English	Poppy, Red-horned	Velvetleaf
Dragonhead, American	Puncturevine	Waterhemp, Common, Tall
Eveningprimrose, Cutleaf	Purslane, Common	Waterprimrose, Winged
Falseflax, Smallseed	Pusley, Florida	Wormwood
Fleabane, Annual		
Flixweed		
Fumitory		

##### Biennials

Burdock, Common	Gromwell	Sweetclover
Carrot, Wild (Queen Anne's Lace)	Knapweed, Diffuse, Spotted	Teasel
Cockle, White	Mallow, Dwarf	Thistle, Bull, Milk, Musk, Plumeless
Eveningprimrose, Common	Plantain, Bracted	
Geranium, Carolina	Ragwort, Tansy	
	Starthistle, Yellow	

##### Perennials

Alfalfa <sup>1</sup>	Bindweed, Field, Hedge	Buttercup, Tall
Artichoke, Jerusalem	Blueweed, Texas	Campion, Bladder
Aster, Spiny, Whiteheath	Bursage, Woollyleaf <sup>1</sup> (Bur Ragweed, Povertyweed)	Chickweed, Field, Mouseear
Bedstraw, Smooth		

Chicory <sup>1</sup>	Knapweed, Black, Diffuse,	Sorrel <sup>1</sup> , Red (Sheep Sorrel)
Clover <sup>1</sup> , Hop	Russian <sup>1</sup> , Spotted	Sowthistle <sup>1</sup> , Perennial
Dandelion <sup>1</sup> , Common	Milkweed, Climbing,	Spurge, Leafy
Dock <sup>1</sup> Broadleaf	Common, Honeyvine,	Sundrops
(Bitterdock), Curly	Western Whorled	Thistle, Canada, Scotch
Dogbane, Hemp	Nettle, Stinging	Toadflex, Dalmatian
Dogfennel <sup>1</sup> (Cypressweed)	Nightshade, Silverleaf	Tropical Soda Apple
Fern, Bracken	(White Horsenettle)	Trumpet creeper (Buckvine)
Garlic, Wild	Onion, Wild	Vetch
Goldenrod, Canada,	Plaintain, Broadleaf,	Waterhemlock, Spotted
Missouri	Buckhorn	Waterprimrose, Creeping
Goldenweed, Common	Pokeweed	Woodsorrel <sup>1</sup> , Creeping,
Hawkweed	Ragweed, Western	Yellow
Henbane, Black <sup>1</sup>	Redvine	Wormwood, Absinth,
Horsenettle, Carolina	Sericia Lespedeza	Louisiana
Ironweed	Smartweed, Swamp	Yankee weed
	Snakeweed, Broom	Yarrow, Common <sup>1</sup>

<sup>1</sup> Noted perennials may be controlled using lower rates of **XtendiMax® With VaporGrip® Technology** than those recommended for other listed perennial weeds.

#### Woody Species

Alder	Hawthorn (Thornapple) <sup>2</sup>	Plum, Sand (Wild Plum) <sup>2</sup>
Ash	Hemlock	Poplar
Aspen	Hickory	Rabbitbrush
Basswood	Honeylocust	Redcedar, Eastern <sup>2</sup>
Beech	Honeysuckle	Rose <sup>2</sup> , McCartney, Multiflora
Birch	Hornbeam	Sagebrush, Fringed <sup>2</sup>
Blackberry <sup>2</sup>	Huckleberry	Sassafras
Blackgum <sup>2</sup>	Huisache	Serviceberry
Cedar <sup>2</sup>	Ivy, Poison	Spicebush
Cherry	Kudzu	Spruce
Chinquapin	Locust, Black	Sumac
Cottonwood	Maple	Sweetgum <sup>2</sup>
Creosotebush <sup>2</sup>	Mesquite	Sycamore
Cucumbertree	Oak	Tarbrush
Dewberry <sup>2</sup>	Oak, Poison	Willow
Dogwood <sup>2</sup>	Olive, Russian	Witchhazel
Elm	Persimmon, Eastern	Yaupon <sup>2</sup>
Grape	Pine	Yucca <sup>2</sup>

<sup>2</sup>Growth suppression only

#### 14.0 LIMIT OF WARRANTY AND LIABILITY

Monsanto Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use label booklet ("Directions") when used in accordance with those Directions under the conditions described therein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein. Specifically, and without limiting the foregoing, MONSANTO MAKES NO RECOMMENDATION OR WARRANTY HEREIN REGARDING THE USE OF ANY PRODUCTS THAT MAY APPEAR ON THE WEBSITE REFERENCED IN THE TANK-MIXING INSTRUCTIONS HEREIN, REGARDLESS OF WHETHER SUCH PRODUCT IS USED ALONE OR IN A TANK MIX WITH XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY. BUYER AND ALL USERS ARE SOLELY RESPONSIBLE FOR ANY LACK OF PERFORMANCE, LOSS, OR DAMAGE IN

CONNECTION WITH THE USE OR HANDLING OF ANY SUCH PRODUCT ALONE OR IN A TANK MIX WITH XTENDIMAX® WITH VAPORGRIP® TECHNOLOGY.

Buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise.

To the extent consistent with applicable law, buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of this Company, including, but not limited to, incompatibility with products other than those set forth in the Directions, application to or contact with desirable vegetation, failure of this product to control weed biotypes which develop resistance to dicamba, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which are outside the application ranges set forth in the Directions, application in any manner not explicitly set forth in the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation.

This Company does not warrant any product reformulated or repackaged from this product except in accordance with this Company's stewardship requirements and with express written permission from this Company.

For in-crop (over-the-top) uses on crops with Xtend® Technology, crop safety and weed control performance are not warranted by Monsanto when this product is used in conjunction with "brown bag" or "bin run" seed saved from previous year's production and replanted.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF THIS COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR, IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES.

Upon opening and using this product, buyer and all users are deemed to have accepted the terms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement. If terms are not acceptable, return at once unopened.

Bollgard II®, Bollgard®, Degree Xtra®, Field Master®, Harness®, Roundup Ready®, Roundup Ready 2 Xtend®, Roundup PowerMAX®, RT 3®, Roundup WeatherMAX®, XtendiMax®, XtendFlex® and VaporGrip® are registered trademarks of Monsanto Technology LLC. All other trademarks are the property of their respective owners.

EPA Reg. No. 524-617

EPA Establishment No. [insert appropriate est. no.]

Lot number [insert appropriate lot number]

Net contents [insert net contents]

Packed for:

MONSANTO COMPANY  
800 N. Lindbergh Blvd.  
ST. LOUIS, MISSOURI, 63167 U.S.A.

© [DATE]